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Vol. 8 No. 1

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Joan C. Courtless, Editor

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Research Summaries

Regular Items

Housing, Transportation, and Miscellaneous Expenditures on Children: A Comparison of Methodologies

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The U.S. Department of Agriculture produces annual estimates of expenditures on children for major budgetary components. One criticism of the estimates is that they rely on a per capita method to estimate housing, transportation, and miscellaneous expenses on a child. This study estimates child-rearing expenses for these three components using an alternative method—a marginal cost method, which assumes expenditures on children may be measured as the difference in total expenses between couples with children and equivalent couples without children. Three marginal cost methods are investigated (the Engel, Rothbarth, and Barten-Gorman methods) using the 1990 Consumer Expenditure Survey. Results of the Rothbarth method are discounted because of problems in implementing this method and the very low estimates obtained. The Engel and Barten-Gorman methods yield estimates of housing and miscellaneous expenses on a child below those of the per capita method and estimates of transportation expenses on a child that are higher than the per capita method. These results should be of use in the development of child support guidelines and foster care payments.

The allocation of household expenditures to children has been a subject of research by those interested in the economics of the family. How much parents spend on their children has important implications for the development of child support guidelines. The U.S. Department of Agriculture (USDA) has estimated family expenditures on children for major budgetary components (housing, food, transportation, clothing, health care, child care and education, and miscellaneous expenses) since 1960 (*11*). A criticism of the USDA child-rearing expense estimates is that they rely on a per capita method to estimate housing, transportation, and miscellaneous expenses (personal care items, entertainment, and reading materials) on a child. This method

[1]The views expressed here do not reflect the policies of the Bureau of Labor Statistics or the views of other BLS staff members.

assumes goods and services are shared equally among family members. Critics believe this method may overstate expenditures on children.

An alternative method for estimating expenditures on children is a marginal cost method, which assumes expenditures on children may be measured as the difference in total expenses between couples with children and equivalent couples without children. Three of the more widely used marginal cost methods are the Engel, Rothbarth, and Barten-Gorman methods (the methods differ by how they equate couples with and without children).

This study estimates child-rearing expenses for housing, transportation, and miscellaneous expenses using these three marginal cost methods. Results are compared with those obtained by using a per capita method. As these methods are dependent on the Consumer Expenditure Survey, a discussion of this data source follows, after which the USDA methodology is described. The marginal cost method is then discussed.

The Consumer Expenditure Survey

The Consumer Expenditure Survey (CE) is the most comprehensive source of household expenditure information available at the national level. Administered by the Bureau of Labor Statistics (BLS), U.S. Department of Labor, the CE has been ongoing since 1980 and collects information on characteristics and income as well as expenditures of consumer units (for this report, the consumer unit is referred to as a household or a family).

About 5,000 households, representing the total civilian noninstitutionalized population, are interviewed once each quarter over four consecutive quarters. Each quarter is considered by BLS to be an independent sample, bringing the total number of households in the survey to about 20,000 households per year. Income data are annual, and expenditure data are collected for the quarter; these quarterly expenditures may be annualized. With regard to expenditures on children, the CE contains expense data on children's clothing, child care, and primary and secondary education. Other expenses related to bringing up a child, such as housing and food, are collected on a household basis. To estimate expenses on a child, these household-level expenses must be allocated among the parents and children.

The U.S. Department of Agriculture Methodology

The methodology used by USDA in estimating child-rearing expenses specifically examines the intrahousehold distribution of expenditures using data for major budgetary components. The most recent estimates were based on the 1990 CE, updated to 1993 dollars using the Consumer Price Index (CPI-U). Multivariate analysis was used to estimate household and child-specific expenditures, controlling for income level, family size, and age of the younger child so estimates could be made for families with these varying characteristics (regional estimates were also derived by controlling for region). The focus was on the younger child in a two-child family, although adjustments may be made for an older child and households with one or three or more children (*11*).

Estimated household and child-specific expenditures were then allocated among family members in a married-couple, two-child family (the husband, wife, older child, and younger child). Since the estimated expenditures for clothing, child care, and education only apply to children, allocations of these expenses were made by dividing the estimates equally among the children in a family.

For food and health care expenses, authoritative bases exist that may be used to calculate individual household member shares. The 1992 USDA food plans show the share of food expenses attributable to individual family members by age and household income level (*11*). These member food budget shares were applied to estimated household food expenditures to determine food expenses on a child. Health care expenses were allocated to each family member based on data from the 1987 National Medical Expenditure Survey (*8*). This survey contains data on the proportion of health care expenses attributable to individual family members. These member budget shares for health care were applied to estimated household health care expenditures to determine expenses on a child.

For housing, transportation, and miscellaneous goods and services, there is no authoritative base for allocating these expenditures among family members. Some of these expenses are for shared goods and services such as utilities, which are used simultaneously by parents and their children. It is difficult—if not impossible—to estimate what proportion may be attributable to individual household members. These budgetary components also contain expenses for goods and services that may be directly attributable to family members, such as many personal care items. However, the CE does not collect individual household member expense information for these items.

Therefore, to allocate overall expenses on housing, transportation, and miscellaneous goods and services among family members, some allocation method must be chosen. USDA used a per capita method. The per capita method simply allocates expenses among household members in equal proportions. For example, in a married-couple family with two children, each child is assigned 25 percent of expenses for a particular budgetary component; for a family with

three children, each child is assigned 20 percent of expenses. Because transportation expenses resulting from work activities are not related to expenses on a child, USDA excluded them from household transportation expenses, using data from a 1990 study by the U.S. Department of Transportation (*14*).

Alternative Method of Estimation

A marginal cost method assumes expenditures on children may be measured as the difference in total expenses between couples with children and equivalent couples without children.

An alternative to the per capita method for allocating expenses on children for these three budgetary components is a marginal cost method. A marginal cost method assumes expenditures on children may be measured as the difference in total expenses between couples with children and equivalent couples without children. This difference is thought to represent additional or marginal expenditures that couples make on a child. The determination of an equivalency measure between couples with and without children is, therefore, critical. Three of the most commonly used marginal cost approaches are the Engel, Rothbarth, and Barten-Gorman methods.

The Engel method is based on the work of Engel in the 19th century (see (*13*) for a summary of Engel's work). It postulates that the percentage of a family's total expenditures allocated to food, their food share, is a measure of well-being. Engel observed that a family's food share decreases as total expenditures increase and that children increase the food share of a household. As a result, a family with children requires greater expenditures to have the same food share (and economic well-being) as a family without children. Families with the same food share are assumed to be equally well-off.

The Rothbarth method, which is based on the work of Rothbarth in the 1940's (*9*), differs from the Engel method in the equivalency measures it adopts. This method postulates that the well-being of families can be determined by the level of excess income available to them after necessary expenditures are met. Whereas Rothbarth defined excess income to include luxuries and savings, recent applications of the Rothbarth method have used expenditures on alcohol, tobacco, and adult clothing as the measure of well-being (*2,6,7*). Additional income increases the excess income available and, therefore, a family's well-being, whereas children decrease excess income available. As with the Engel method, a family with children requires more income (or expenditures) to have the same excess income (and economic well-being) as a family without children. Families with the same level of excess income are assumed to be equally well-off.

As with the Engel and Rothbarth methods, the Barten-Gorman method is based on an equivalency measure to determine expenses on a child (*1,5*). While the Engel and Rothbarth methods use a proxy for the well-being of a household, the Barten-Gorman method uses a more general utility function to measure it. The utility level of a household depends on the level of consumption of a basket of market commodities. The Barten-Gorman method differs from the Engel and Rothbarth methods by allowing the presence of children to change the basket of commodities consumed by the household; in other words, the presence of children has substitution effects. As with the previous two methods, increases in income allow a household to consume more and increase their well-being, whereas children decrease the amount of commodities that each person in the household can consume and, therefore, decrease a household's well-being. As a result, families with children require more income to have the same level of utility (and economic well-being) as families without children. Families with the same level of utility are assumed to be equally well-off.

Deaton and Muellbauer (*3*) describe the theoretical basis for measuring child costs using these various methodologies. In actually estimating expenses on children in the United States, the Engel method was implemented by Espenshade using data from the 1972-73 CE (*4*). Data from the 1972-73 CE were also used by Lazear and Michael (*7*) and Gronau (*6*) in implementing the Rothbarth method and by van der Gaag and Smolinksy (*15*) in implementing the Barten-Gorman method. All three methods were later implemented by Betson using data from the 1980-87 CE in a study commissioned by the U.S. Department of Health and Human Services (*2,13*).

When estimating expenses on children, these researchers have applied the methods to total expenditures overall. This study differs from these other studies as it uses a marginal cost approach only to estimate expenditure shares attributable to children for housing, transportation, and miscellaneous goods and services—budgetary components for which the CE contains no child-specific expense data and no authoritative base exists to allocate these expenses among family members. Also, it uses more recent expenditure data—the 1990 CE—to implement the Engel, Rothbarth, and Barten-Gorman methods.

Data

Data used in this study are from the 1990 CE. These are the same data used in the most recent USDA child-rearing expense estimates. To implement the Engel, Rothbarth, and Barten-Gorman methods, married-couple families with and without children were included. For married-couple families with children, those (1) with at least one own child age 17 or under in the household, (2) with six or fewer children, (3) with no other related or unrelated people present in the household except own children, and (4) who were complete income reporters were selected. Complete income reporters are households that provide values for major sources of income, such as wages and salaries, self-employment income, and Social Security income. It should be noted that although the CE classifies families as complete income reporters, these families may not provide information on all sources of income.

Table 1. Characteristics of married couples with two children and without children, 1990

Characteristic	With two children	Without children
	Percent	
Husband's education		
No high school diploma	13	10
High school diploma	31	35
Some college	23	26
College degree or more	33	29
Wife's education		
No high school diploma	12	11
High school diploma	37	33
Some college	27	28
College degree or more	24	28
Husband's employment status		
Full time	81	77
Part time	16	20
Not working	3	3
Wife's employment status		
Full time	35	58
Part time	41	30
Not working	24	12
Race		
White	90	91
Non-White	10	9
Tenure		
Own	77	63
Rent	23	37
Before-tax income	$44,480	$45,790
Husband's age	38	37
Wife's age	35	36
Household size	4.0	2.0
Total expenditures	$36,860	$34,550
Housing expenditures	$10,090	$10,000
Transportation expenditures	$7,430	$7,110
Miscellaneous expenditures	$3,010	$2,680

For married-couple families without children, those (1) with both spouses age 55 or under, (2) with no other related or unrelated people present in the household, and (3) who were complete income reporters were selected. The age limit ensured that childless couples would be comparable to couples with children. With no age cap, the sample of married couples without children in the home included many elderly couples. These elderly couples without children were thought not to be comparable to couples with children. The sample consisted of 4,345 married couples with children and 1,516 without children. The sample was weighted using BLS weighting methods to reflect the population.

A description of married couples with two children and those without children is shown in table 1, p. 5. Families with two children were examined because the USDA child-rearing expense estimates use a two-child family as the base. Husbands with children had a higher level of education than their counterparts without children. The reverse was true for wives. As could be expected, a higher proportion of women without children were in the labor force; 58 percent of women without children were employed full time, compared with 35 percent of those with children. Although there was a large difference in employment status of wives, average before-tax income for the two family groups was similar ($44,480 for couples with children and $45,790 for those without children). Average ages of husbands and wives in the two groups were also similar. Total expenditures were slightly higher for couples with children. Housing expenses were similar, although a larger proportion of married couples with children owned their own home. For homeowners, housing expenses do not include mortgage principal payments; such payments are considered in the CE to be a loan repayment and not consumption. Miscellaneous expenses were about 12 percent higher for couples with children than those without children.

Empirical Models

For the Engel method the following equation was estimated to determine the equivalence scale:

(1) $\ln F = a + b\ln TE + c1HHTY1 + c2HHTY2 + c3HHTY3$

where:

lnF = log of total food expenditures
lnTE = log of total expenditures
HHTY1 = 1 if married couple with one child, 0 otherwise
HHTY2 = 1 if married couple with two children, 0 otherwise
HHTY3 = 1 if married couple with three or more children, 0 otherwise
(omitted category being married couple without children)

The equivalence scale is determined by equating the food shares for a household with two children to a household without children. Again, two children were selected because the USDA estimates used a two-child family as the base. Ages of the children were not controlled for, as an overall scale was desired. Also, because the scale was applied to USDA estimates of household expenditures by age of the younger child, children's age has already been considered. The log of the food share (lnFshr) is given by lnF - lnTE, which can be found by subtracting lnTE from both sides of equation (1). Logs of food and total expenditures are used as previous research has shown that these transformations give the best fit (2), and food expenditures are expected to have a curvilinear relationship with total expenditures. The log of the food share for married couples with two children then is:

(2) $\ln Fshr(2) = \ln F - \ln TE = a + (b - 1)\ln TE + c2$

and the log of the food share for couples without children is:

(3) $\ln Fshr(0) = \ln F - \ln TE = a + (b - 1)\ln TE$

Given the average expenditures for a household with two children, the Engel equivalence scale (Se) is determined by finding the total expenditures required by a household without children such that the households' food shares are the same. Therefore, if the average expenditures for a household with two children is TE(2) and those of a household without children is TE(0), the equivalence scale is given by:

(4) $Se = TE(2)/TE(0)$, such that $\ln Fshr(2) = \ln Fshr(0)$

By equating the food shares in equations (2) and (3) and solving for TE(2)/TE(0), the equivalence scale is:

(5) $\ln Se = c2/(1 - b)$

or:

(6) $Se = \exp(c2/(1 - b))$

For the Rothbarth methodology, a similar equation was estimated to determine the equivalence scale. The dependent variable used was expenditures on alcohol, tobacco, and adult clothing. As stated, previous researchers have also implemented this approach using alcohol, tobacco, and adult clothing expenditures as the measure of well-being (*2,6,7*). The specific equation estimated was:

(7) $\ln A = a + b\ln TE + c1HHTY1 + c2HHTY2 + c3HHTY3$

where:

lnA = log of expenditures on alcohol, tobacco, and adult clothing
lnTE = log of total expenditures
HHTY1 = 1 if married couple with one child, 0 otherwise
HHTY2 = 1 if married couple with two children, 0 otherwise
HHTY3 = 1 if married couple with three or more children, 0 otherwise
(omitted category being married couple without children)

Although there was a large difference in employment status of wives, average before-tax income for the two family groups was similar ($44,480 for couples with children and $45,790 for those without children).

The log of expenditures on alcohol, tobacco, and adult clothing for married couples with two children is:

(8) $\ln A(2) = a + b\ln TE + c2$

and the log of these expenses for couples without children is:

(9) $\ln A(0) = a + b\ln TE$

The Rothbarth equivalence scale (Sr) is determined by finding the total expenditures required by a household without children such that expenses on alcohol, tobacco, and adult clothing are the same as those of a household with two children. As with the Engel method, if the average expenditures for a household with two children is TE(2) and those of a household without children is TE(0), the equivalence scale is given by:

(10) $Sr = TE(2)/TE(0)$ such that $\ln A(2) = \ln A(0)$

By equating alcohol, tobacco, and adult clothing expenses in equations (8) and (9) and solving for TE(2)/TE(0), the equivalence scale is:

(11) $\ln Sr = -c2/b$

or:

(12) $Sr = \exp(-c2/b)$

For the Barten-Gorman method, an extended linear expenditure system was estimated to obtain a measure of the well-being of a household as represented by a utility function. Using a seven-commodity expenditure system, the following linear equations for each expenditure category were estimated:

(13) $E_1 = a_1 + b_1Y + c1_1HHTY1 + c2_1HHTY2 + c3_1HHTY3$
(14) $E_2 = a_2 + b_2Y + c1_2HHTY1 + c2_2HHTY2 + c3_2HHTY3$
(15) $E_3 = a_3 + b_3Y + c1_3HHTY1 + c2_3HHTY2 + c3_3HHTY3$
(16) $E_4 = a_4 + b_4Y + c1_4HHTY1 + c2_4HHTY2 + c3_4HHTY3$
(17) $E_5 = a_5 + b_5Y + c1_5HHTY1 + c2_5HHTY2 + c3_5HHTY3$
(18) $E_6 = a_6 + b_6Y + c1_6HHTY1 + c2_6HHTY2 + c3_6HHTY3$
(19) $E_7 = a_7 + b_7Y + c1_7HHTY1 + c2_7HHTY2 + c3_7HHTY3$

where:

E_1 = expenditures on housing
E_2 = expenditures on transportation
E_3 = expenditures on food
E_4 = expenditures on clothing
E_5 = expenditures on health care
E_6 = expenditures on miscellaneous goods and services
E_7 = all other expenditures
Y = before-tax household income
HHTY1 = 1 if married couple with one child, 0 otherwise
HHTY2 = 1 if married couple with two children, 0 otherwise
HHTY3 = 1 if married couple with three or more children, 0 otherwise
(omitted category being married couple without children)

Following Betson (2) and Smeeding et al. (*10*), it is assumed that given their income and prices, households maximize a discounted sum of utility over two periods. The difference between income and total expenditures (ΣEj) can be viewed as the savings and taxes of the household.

Using this information about the choices between two periods and the estimates of equations (13) to (19), the demands for the seven commodities may be obtained by assuming that a household maximizes a Stone-Geary utility function given by:

$$(20) \qquad u\left(\frac{x_1}{S_1(k)}, \ldots, \frac{x_n}{S_n(k)}\right) = \Sigma_i \beta_i \ln\left(\frac{x_i}{S_i(k)} - \gamma_i\right)$$

In this utility function, the γi parameters represent the subsistence requirements for each commodity. Each Si is a commodity-specific scale that deflates the consumption of each commodity and, therefore, a household's utility level. For example, the food-specific scale (Sf) for a household without children would be one, whereas it could be two for a household with two children; this would indicate a household with two children needs twice as much food as a household without children to obtain the same level of utility.

The estimates obtained from these regressions can be used to calculate the parameters in the utility function, the commodity-specific scales, and the implied cost functions. With this information the Barten-Gorman equivalence scales can be determined (for the formulas used to do this, see (*10*)). As with the Engel and Rothbarth methods, the equivalence scale for a household with two children is given by the ratio of the cost for a household with two children to the cost for a household without children to obtain the same level of utility, that is $S_{bg} = C(U_0,2)/C(U_0,0)$. With the Barten-Gorman method, these cost levels depend on the parameters of the utility function obtained from the estimates given by the regressions. Using the coefficients estimated in equations (13) to (19), the equivalence scale is:

$$(21) \qquad S_{bg} = \frac{\frac{\Sigma a_i + \Sigma c2_i}{1 - \Sigma b_i} + \exp\left[U_0 + \frac{1}{\Sigma b_i}\left[\Sigma b_i \ln\left(1 + \frac{(1-\Sigma b_i)c2_i + b_i \Sigma c2_i}{(1-\Sigma b_i)a_i + b_i \Sigma a_i}\right) - \Sigma b_i \ln(b_i)\right]\right]}{\frac{\Sigma a_i}{1 - \Sigma b_i} + \exp\left[U_0 - \frac{1}{\Sigma b_i}\Sigma b_i \ln(b_i)\right]}$$

Results

The estimated equivalence scales and the implied expenditure shares from the Engel, Rothbarth, and Barten-Gorman methods are presented below (actual parameter estimates from the empirical models are available from the authors on request). These scales are for married-couple, two-child families. These equivalence scales were used to determine the marginal cost of two children. The marginal cost of children was determined by multiplying the difference in the equivalence scales between a two-child family and a childless family by the total expenditures of the family without children. The expenditure shares for the children in a family were determined by dividing the marginal cost of children by the total expenditures of the family with two children. It is assumed that expenditures on children are equally allocated. The expenditure share on a single child in the family, therefore, is half the total share.

The equivalence scale for a household with two children (S2) is the ratio of total expenditures for a household with two children, TE(2), to total expenditures of a household without children, TE(0), such that they are equally well-off. Recalling that S(2) = TE(2)/TE(0) and that expenditures on a child in a two-child family are TE(2) - TE(0), the share spent on each child is [S(2)-1]/2*S(2). Because of the functional forms used in this study, the Engel and Rothbarth scales do not depend on average expenditures of a household. The Barten-Gorman scales were calculated based on average income of a family without children; however, results were not sensitive to this assumption (*10,15*).

Marginal cost methods	Equivalence scale	Expenditure share per child in a two-child family
		Percent
Engel	1.57	18
Rothbarth	1.17	7
Barten-Gorman (overall)	1.51	17
Housing	1.39	14
Transportation	1.59	19
Miscellaneous	1.54	18

The marginal cost of children was determined by multiplying the difference in the equivalence scales between a two-child family and a childless family by the total expenditures of the family without children.

The Engel scale of 1.57 implies that a family with two children requires 57 percent more expenditures to have the same food share (and economic well-being) as a family without children, while the Rothbarth scale of 1.17 implies that a family only requires 17 percent more to have the same level of expenditures on alcohol, tobacco, and adult clothing. The overall Barten-Gorman scale of 1.51 implies that a family requires 51 percent more. These figures agree with results obtained by Deaton and Muellbauer (*3*): the Barten-Gorman scale is likely to be smaller than the Engel scale and larger than the Rothbarth scale.

The Engel and Rothbarth scales estimated in this study are lower than those obtained by other researchers (*2,4,6,7,13*). The Engel scale of this study, however, is similar to the scales used in determining the poverty thresholds (*12*). In addition, the estimates of the Barten-Gorman scales are larger than those obtained by other researchers (*2,13,15*). These differences may occur because these other researchers estimated scales that depended on age of children and demographic characteristics, and they used older data. This study's use of dummy variables for number of children in the household averaged the effects of age of children and other demographic characteristics.

The Engel, Rothbarth, and Barten-Gorman equations were also estimated controlling for age of the younger child (the age categories used in the analysis being 0-2, 3-5, 6-8, 9-11, 12-14, 15-17). The equivalence scales obtained for each age category varied. As an average scale was desired in order to make an overall adjustment, age scales were not thought practical. In addition, some of the age scales derived from the various methods did not seem reasonable. For these reasons, overall scales were calculated for an average household with two children.

A major problem with the Rothbarth scale is that one must gauge excess income, which Rothbarth put forth as a measure of economic well-being. The CE does not have a direct measure of excess income. Instead, it must be measured indirectly. Other research has used expenditures on alcohol, tobacco, and adult clothing as a measure. Since the CE classifies adult clothing as clothing for people age 16 and over and about 20 percent of children in two-child households were 15 years and over in this study, expenditures on adult clothing include expenditures for children. This means the expenditures on alcohol, tobacco, and adult clothing (and hence, economic well-being) are overstated. Using this overstated level of expenditures implies that a household

with children requires less total expenditures than it actually does to obtain the same economic well-being as a household without children. Therefore, the Rothbarth scale underestimates expenditures on children. Results obtained with the Rothbarth method in this study confirm this. The Rothbarth scale appears unrealistically low since it implies that a child in a married-couple, two-child family adds only 7 percent to total expenditures. Because of these problems with the Rothbarth method, results obtained using it are discounted in this study.

Turning to the Engel and Barten-Gorman methods, shares derived from these methods (individual budgetary component shares were used with the Barten-Gorman method) were applied to estimated family housing, transportation, and miscellaneous expenses for married-couple families with two children. The household expense estimates for these components were made using the 1990 CE updated to 1993 costs using the CPI-U. The estimates give overall average household expenditures on housing, transportation, and miscellaneous goods and services for a family in one of three income categories with the younger child in one of six age categories (for more information on how these household estimates were made, see (*11*)).

Tables 2 to 4 show the 1993 dollar estimates of these budgetary components attributable to the younger child in a two-child family using the Engel and Barten-Gorman marginal cost methods and the per capita method currently used by USDA. These figures are for the overall United States for a middle income household; the proportionate differences among the various methods also apply to lower and higher income families.

The Engel method produced estimates of expenditures on a child for housing and miscellaneous goods and services that were 28 percent below the estimates

Table 2. Estimated annual housing expenditures on a child, 1993[1]

Age of child	USDA	Engel	Barten-Gorman
		Dollars	
0 - 2	2,560	1,850	1,440
3 - 5	2,600	1,870	1,460
6 - 8	2,520	1,820	1,410
9 - 11	2,190	1,580	1,230
12 - 14	2,220	1,600	1,240
15 - 17	2,250	1,620	1,260
Total (0-17)	43,020	31,020	24,120

[1]Expense estimates are for the younger child in husband-wife families with two children and before-tax income between $32,000 and $54,100 for the overall United States.

Table 3. Estimated annual transportation expenditures on a child, 1993[1]

Age of child	USDA	Engel	Barten-Gorman
		Dollars	
0 - 2	1,080	1,290	1,370
3 - 5	1,100	1,330	1,400
6 - 8	1,320	1,590	1,670
9 - 11	1,170	1,410	1,480
12 - 14	1,370	1,650	1,740
15 - 17	1,650	1,900	2,010
Total (0-17)	23,070	27,510	29,010

[1]Expense estimates are for the younger child in husband-wife families with two children and before-tax income between $32,000 and $54,100 for the overall United States.

Table 4. Estimated annual miscellaneous expenditures on a child, 1993[1]

Age of child	USDA	Engel	Barten-Gorman
		Dollars	
0 - 2	660	470	470
3 - 5	730	520	520
6 - 8	840	600	600
9 - 11	750	540	540
12 - 14	790	570	570
15 - 17	800	580	580
Total (0-17)	13,710	9,840	9,840

[1]Expense estimates are for the younger child in husband-wife families with two children and before-tax income between $32,000 and $54,100 for the overall United States; miscellaneous expenses include personal care items, entertainment, and reading materials.

of the per capita method for these two budgetary components. The Barten-Gorman method produced estimates for housing that were 44 percent below the per capita method and estimates for miscellaneous goods and services that were 28 percent below those of the per capita method.

For transportation expenses on a child, the Engel and Barten-Gorman methods produced estimates that were higher than the per capita method because the per capita method excludes the proportion of household transportation expenses that is employment-related (depending on age of the child, 38 to 40 percent of transportation activities were employment-related (*14*)). The Engel method produced estimates of transportation expenses on a child that were 19 percent above the USDA estimates, and the Barten-Gorman method produced estimates that were 26 percent above the USDA estimates.

Discussion

Of the three marginal cost methods examined in this study that allocate household expenditures for housing, transportation, and miscellaneous goods and services to children in a family, the Engel and Barten-Gorman methods were thought to yield reasonable estimates. The Rothbarth method was thought to result in estimates that were unrealistically low. If the Engel or Barten-Gorman methods are preferred over the per capita method for estimating expenses for housing, transportation, or miscellaneous goods and services, the child-rearing expense estimates produced by USDA could be adjusted in the manner previously described. For example, if the Engel approach is believed to be more appropriate for measuring child-rearing housing expenses than the USDA per capita approach, the USDA child-rearing expense estimates for housing should be reduced by 28 percent; or if the Engel approach is believed to be more appropriate for measuring child-rearing transportation expenses, the USDA child-rearing expense estimates for transportation should be increased by 19 percent.

However, the three marginal cost methods described in this paper are not necessarily more appropriate than the USDA per capita method for the three budgetary components examined. These marginal cost methods have limitations that are equal to or exceed those of the per capita method. Each of the three versions of the marginal cost method assumes a "true" equivalency measure. There is no established base for such a measure in the economic literature. The assumption that families who spend the same proportion of their total expenditures on food are equally well-off has never been proven, nor has the assumption that families who have the same amount of excess income are equally well-off, or that families behave according to a specific utility function.

Also, the marginal cost method assumes the difference in total expenditures between couples with and without children can be solely attributed to the children in a family. Many couples without children may adjust their expenditures in anticipation of someday having children. This is often the case with housing. Couples without children may purchase homes larger than they presently require because they expect to have children in the future. Comparing such couples to those with children could lead to underestimates of parental expenditures on children.

In this study, the share of expenditures allocated to children derived from the Engel and Barten-Gorman methods were only applied to housing, transportation, and miscellaneous expenses. The Engel share could be applied, as previous research has done, to overall expenditures, and Barten-Gorman shares could be derived for other budgetary components and applied to estimated expenditures for each component. The Engel method implied that 36 percent of total household expenditures are allocated to the children in a two-child family, and the overall Barten-Gorman method implied that 34 percent of expenditures are allocated to the children (see text table, p. 9). Interestingly, the USDA child-rearing expense estimates found that 37 percent of total household expenditures are allocated to the children in a two-child family (*11*). However, applying the shares of the two marginal cost approaches to estimate expenses on children does not make use of the children-specific expense data in the CE or other studies' findings of the share of food and health care expenses allocated among family members.

Shares of the three budgetary components could also be calculated for families with one child and three or more children to determine differences in expenses per child due to family size. This has already been done with the original USDA estimates for overall expenditures. USDA estimates found that families spend about 26 percent more on a single child and about 22 percent less on each child in a family with three or more children (*11*).

USDA estimates child-rearing expenses for single-parent families as well as married-couple families. The marginal cost approach was not applied to the housing, transportation, and miscellaneous expenses of single-parent families as the selection of a comparison group was very difficult. Single parents with children face circumstances that are very different from those faced by single people. Most single parents are mothers with low family incomes. Single people include many professionals with high incomes and high expenditures. Comparing the two groups could lead to the illogical result that expenses on children are negative.

In summary, without detailed data on expenditures attributed to children, the allocation method depends on the assumptions one makes. Although it may be possible to allocate some of the miscellaneous goods and services to children, it is difficult to allocate the shared goods and services, such as housing. The lack of data and the limitations associated with the marginal cost approaches have led USDA to adopt the per capita method as the preferred approach.

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Assets of Elderly Households

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Assets are an important component of the economic status of elderly households. This study reports their asset levels using the 1989 Survey of Consumer Finances. The median level of assets was $79,000. There were substantial differences among different types of households. Low assets were associated with less education, non-White or Hispanic heads, income of $10,000 or less, renters, and single women. Recognizing the economic vulnerability of households with low assets assists service providers and policymakers in serving elders.

Assets of elderly households represent the accumulation of wealth over a lifetime. Assets reflect work history, salaries, investments, family size, household needs, and patterns of spending and saving. Although various life events and circumstances that are unique to the household help determine the level of assets, there are patterns to the accumulation of assets for this age group.

Of course, age is a major factor. Assets shrink over time as retired families need to draw upon them. But other demographic and socioeconomic characteristics are related to assets as well. This paper reports the assets of families with a head 65 years or older by relevant characteristics such as family type, education, race/ethnicity, and income.

Data

Of the two surveys that provide household data on assets, the Survey of Income and Program Participation (SIPP) and the Survey of Consumer Finances (SCF), the SCF was chosen for this analysis. Because the SIPP was primarily designed to provide estimates of income and government program participation, it contains few observations for high-income households so may underreport wealth (*3*). The SCF has been conducted regularly with support from the Federal Reserve from 1946 through 1970, with a survey in 1977 on credit and the current series on a triennial basis since 1983.

Data for this report are from the 1989 SCF collected by the Survey Research Center at the University of Michigan for the Federal Reserve.[1] Kennickell and Shack-Marquez (*4*) describe the survey, report findings from the 1989 survey, and compare them with 1983 data. They describe the SCF as "designed specifically to gather detailed and comprehensive information on assets, liabilities, and income flows from a representative sample of the population of U.S. families. Because the ownership of some assets, such as corporate stocks, is relatively concentrated in a small number of families, the survey makes a special effort to ensure proper representation

[1] In cooperation with the Department of the Treasury, the Department of Health and Human Services, the National Institute on Aging, the Small Business Administration, the General Accounting Office, the Comptroller of the Currency, and the Congressional Joint Committee on Taxation (*4*).

of such assets by systematically oversampling wealthier families." This effort included a two-part strategy. Of the 3,134 families in the sample, 2,277 were selected by standard multistage area-probability sampling methods. The remaining 866 families were selected using tax data to oversample wealthier families. The definition of family[2] used in the SCF refers to a primary economic unit that may be a single individual.

For this report, households headed by someone 65 years or older were chosen, yielding a sample of 732. The data[3] have been weighted to provide estimates of the U.S. population. Median dollars of assets are reported because medians are better indicators of the wealth holdings of typical households than are mean statistics (*3*). The distribution of assets is not symmetrical. It is skewed with households concentrated at the low end of the distribution and fewer households with high assets. With this distribution, the median is lower than the mean but less sensitive to outliers (*3*).

Median Assets

The median level of assets of elderly households was $79,000.[4] Table 1 reports median assets by various household characteristics. For reference and comparison purposes, income and net worth were also reported. Current income of elderly households affects the need for these families to draw on assets for daily living. Also, as the table shows, the characteristics associated with higher incomes were identical to those associated with higher assets or net worth. Net worth (assets less debt) is reported to indicate the low levels of debt held by these families. As shown,

[2]The term "household" is used in this paper to refer to the SCF definition of family.
[3]The first imputation replicate from the public use tape.
[4]The 1988 SIPP data provide medians similar to this study: assets of $73,000 and income of $15,000 for households with a head 65 years or older (*2*).

Table 1. Median before-tax household income, assets, and net worth of households with a head 65 years or older, 1989

Household characteristics	Percent of families	Income	Assets	Net worth
		$ thousands		
All households (65 years or older)	100	14	79	74
Age of household head				
65 - 74	58	15	82	80
75 or older	42	13	72	69
Household type				
Single woman	36	10	54	46
Single man	9	*	*	*
Married couple	45	20	117	114
Other[1]	10	*	*	*
Education of household head				
8th grade or less	33	10	35	35
Some high school	17	13	69	69
High school diploma	26	16	82	80
Some college	10	18	231	184
College degree	15	33	249	230
Race/ethnicity of household head				
White	82	16	93	93
Non-White or Hispanic	18	7	15	15
Housing tenure				
Own	74	16	108	104
Rent	26	8	4	3
Income				
Less than $10,000	30	6	12	12
$10,000 - $19,999	37	14	80	80
$20,000 - $29,999	14	24	117	115
$30,000 - $49,999	11	36	257	233
$50,000 or more	8	*	*	*

[1]Other household types include siblings, three-generation families, nonrelated individuals, etc.
* N too small to report.

the median net worth of many groups was only slightly less than median assets because many people in this age group have paid off their mortgage and may incur debt only for a car or major medical bill.

Households with a head 75 years or older had median assets of $72,000, compared with $82,000 for those 65 to 74 years of age. The median asset level of single women was $54,000, less than half the level owned by married couples.[5] Also, single women carried more debt, primarily mortgage debt; their median net worth was $46,000.

Education and assets were directly related. Increases in education level were matched by substantial increases in assets. For households with a head who had an eighth-grade education or less, the median level of assets was $35,000; for college graduates, it was $249,000. Race and ethnicity of the family head were also strongly related to assets. Non-White and Hispanic households had median assets of $15,000; non-Hispanic White households had $93,000.

Homeowners had higher assets than renters since equity in a home is a major component of assets for many families. Homeowners had assets of $108,000, compared with only $4,000 for others. Clearly, those who rented had little in the way of other assets. Either they have never acquired a home and other assets, or they have had to sell their home and use these and other assets to meet medical or other expenses.

Income and assets are related for several reasons. People who have higher incomes after age 65 are likely to have had a history of higher incomes during their earning years since Social Security and pensions are largely based on earnings. These people have had more opportunity to accumulate assets. In turn, interest and earnings from assets produce income. With higher incomes, there is less need to draw down assets. Those households with incomes less than $10,000 accounted for 30 percent of the households. Their median asset level was $12,000.

In summary, households that have low assets have these characteristics: Single women, education of eighth grade or less, non-White or Hispanic, renters, and incomes of $10,000 or less. These characteristics were interrelated and households with low assets often possessed several of these characteristics.

Education and assets were directly related. Increases in education level were matched by substantial increases in assets.

For example, figure 1, p. 16, shows that single-woman households had lower assets than married-couple households. Single women who were 75 years or older had an asset median that was lower than younger single women or married couples of either age group. Similarly, non-White or Hispanic households had substantially lower assets than White households. Non-White households with a head 75 years or older had lower assets than younger non-White or White households of either age group, as shown in figure 2, p. 16.

Ownership of Assets

The patterns of asset ownership varied by type of asset. Three of four elderly households owned a home, vehicle, and checking account (table 2, p. 17). Fewer than half had savings bonds, certificates of deposit, savings accounts, money market funds, and stocks. Ownership patterns also varied by household characteristic.

Age. People 75 years or older were less likely than those 65 to 74 years old to own a home or vehicle (table 2), probably because both require effort to maintain and neither offers liquidity. Also, more people in the older age group may no longer be able to drive. Older elders

[5]Households of single men and other types of household composition were included in the study, but assets are not reported here for these subsets of the population because the sample sizes were too small.

Figure 1. Median assets of married couples and single women, 65-74 years and 75 years or older, 1989

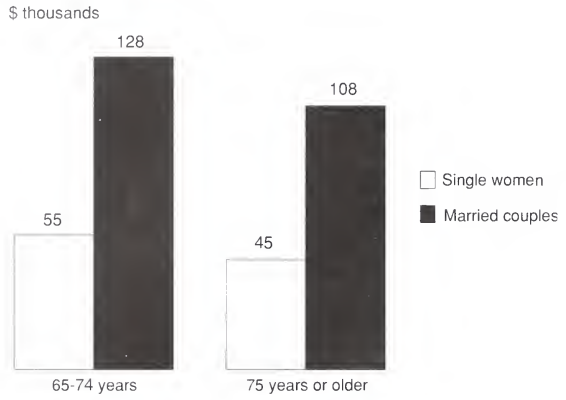
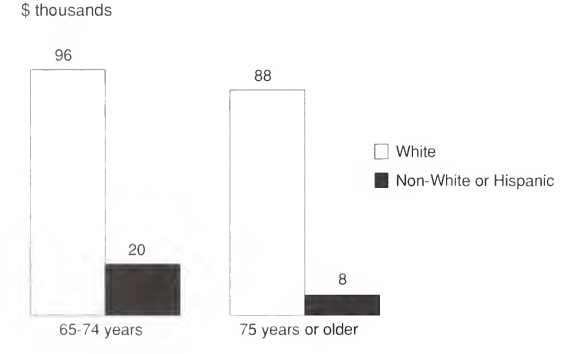


Figure 2. Median assets of elderly, 65-74 years and 75 years or older, by race, 1989



were also less likely to own savings bonds. Perhaps they used those monies and those from the sales of homes or vehicles to purchase certificates of deposit, money market funds, and stocks. They were more likely than the younger elders to own these financial assets.

Household type. Married couples were more likely than single women to own every type of financial and nonfinancial asset with the exception of savings accounts. Eighty-nine percent had a home, compared with 63 percent of single women. Nearly all owned a car or truck, whereas only half of single women had a vehicle.

Education of household head. Those with more education were more likely to own a home and a vehicle. Ownership of money market accounts or stocks was also common for these families, especially those with a college education. Education was not related in the same way to checking, certificates of deposit, or savings accounts. Highly educated people were not any more likely than others to use these instruments; people with college degrees may put monies into money market accounts and stocks instead of certificates of deposit and savings accounts.

Other household characteristics. The percentage of households owning every financial and nonfinancial asset was lower for non-White or Hispanic households than for White households. Also, renters were less likely than homeowners to own each asset. As for income, the less income households had, the less likely they were to own a home, checking accounts, savings bonds, money market accounts, and stocks.

In general, those with fewer resources were less likely to own each type of asset. However, for households with the highest education and income, patterns of asset ownership were much higher in stocks and somewhat mixed in other instruments.

Table 2. Percent owning selected financial and nonfinancial assets, by household with a head 65 years or older, 1989

Household characteristics	Home	Vehicles	Checking	Savings bonds	CD's	Savings accounts	Money market	Stocks
All households (65 years or older)	74	75	79	41	35	36	29	21
Age of household head								
65 - 74	77	82	79	46	31	37	27	20
75 or older	69	66	80	34	40	36	30	22
Household type*								
Single woman	63	52	76	30	36	40	26	15
Married couple	89	97	85	54	39	35	33	28
Education of family head								
8th grade or less	69	63	66	30	24	23	15	5
Some high school	77	71	81	45	39	35	21	21
High school diploma	72	81	89	47	40	50	28	20
Some college	73	85	83	45	44	45	50	24
College degree	83	92	89	50	38	38	57	54
Race/ethnicity of family head								
White	78	80	85	46	41	40	33	25
Non-White or Hispanic	52	52	52	20	6	21	8	2
Housing tenure								
Own	100	82	83	48	40	39	32	25
Rent	0	57	68	23	21	29	19	9
Income*								
Less than $10,000	54	46	63	21	12	27	12	1
$10,000 - $19,999	76	83	82	47	41	43	27	18
$20,000 - $29,999	87	93	89	47	56	39	35	29
$30,000 - $49,999	93	91	93	60	45	42	47	45

* N too small to report for household type of single men and incomes of $50,000 or more.

Median Levels of Individual Assets

The median level of assets varied by type of asset (table 3). Equity in a home was the major asset; the median level was $52,000. No other asset came close in importance for two reasons: a large proportion of households owned a home, and its median value was high compared with other assets. Three-fourths of households owned vehicles and checking accounts, but the median values were $5,000 and $1,000, respectively. Median asset levels for certificates of deposit and stocks were $21,000 and $18,000 for those holding the assets, but only 35 percent and 21 percent, respectively, owned them. Other median amounts were $9,000 for money market accounts, $3,000 for savings bonds, and $3,000 for savings accounts.

Median amounts for each type of asset by household characteristics are not reported because the number of households in some subsections of the sample was too small to provide national estimates. However, the median amounts that can be reported show the same general pattern as found with total assets. For those holding assets, the median amounts were less for households with these characteristics: 75 years or older, single women, less education, non-White or Hispanic, renter, and lower income.

Table 3. Median amount of financial and nonfinancial assets of households holding such assets, by household with a head 65 years or older, 1989

Household characteristics	Home	Vehicles	Checking
		$ thousands	
All households (65 years or older)	52	5	1
Age of household head			
65 - 74	52	6	1
75 or older	50	4	1
Household type*			
Single woman	50	3	1
Married couple	60	7	1
Education of household head			
8th grade or less	35	3	1
Some high school	50	5	1
High school diploma	51	5	1
Some college	100	7	2
College degree	130	8	2
Race/ethnicity of household head			
White	55	5	1
Non-White or Hispanic	40	3	1
Housing tenure			
Own	52	5	1
Rent	NA	3	1
Income*			
Less than $10,000	30	2	1
$10,000 - $19,999	55	4	1
$20,000 - $29,999	52	7	1
$30,000 - $49,999	80	9	3

* N too small to report for household type of single men and incomes of $50,000 or more.
NA = Not available.

Summary and Implications

These findings on assets and net worth of elderly households add to the knowledge of their economic status. Income and expenditures are useful measures but, especially for elderly households, assets are an important component of economic status and are indicative of economic well-being. Asset measures identify the same groups as economically vulnerable that other measures identify; being 75 or older, a single woman, less educated, and non-White are characteristics associated with lower assets as well as lower income and expenditures.

Having low assets limits the ability of a household to handle health, housing, or other crises. In addition, the feelings of self-confidence and self-reliance that are associated with knowing there are resources to handle life events may be difficult to sustain. By recognizing the economic vulnerability of these households and the limited choices and options available to them, service providers and policymakers may be better able to serve the elderly segment of the population.

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Trends in Apparel and Textiles

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Consumer expenditures for textiles and apparel are affected by price, competing demands from other items in the family budget, and lifestyle. In 1993, prices for apparel commodities rose 1.2 percent over 1992. Annual per capita spending for clothing and shoes was $919, about $24 more than in 1992. Data from the 1992 Consumer Expenditure Survey show that the mean annual expenditure for apparel and apparel products and services by U.S. households was $1,710. This expenditure accounted for almost 6 percent of total expenditures for all households. Households in the Northeast had higher apparel expenditures and spent a higher share of total expenditures for apparel than did households in other regions. U.S. per capita fiber consumption increased from 55.4 pounds in 1984 to 76.0 pounds in 1993—a 37-percent increase. Over half of the fiber used in U.S. apparel in 1992 was cotton. Other information—apparel and textile trade, fiber consumption and end-use, new fibers, and innovations in merchandising—is presented to provide professionals in clothing and textiles with an overall perspective on trends in fibers, fabrics, and apparel.

Clothing is a universal need—for protection against the elements, purposes of decorum, and as a means of expression. Although the manner in which these needs are met varies by culture, virtually all clothing satisfies one or more of these attributes. For instance, throughout history, clothing has been used to denote social class. Even today, a person's attire can attest to sociodemographic characteristics.

Clothing has traditionally been considered one of our three basic necessities, along with food and shelter. Nevertheless, in terms of budget share, clothing (6 percent) ranks considerably behind housing (32 percent), transportation (18 percent), and food (14 percent) (*26*). According to the Consumer Expenditure Survey, expenditure shares for clothing have decreased slightly since 1972-73 when 7 percent of total expenditures were attributed to apparel and services (*27*). This reflects the competing demands from other items in the family budget. Also, prices for apparel and upkeep have risen more slowly than the overall inflation rate since 1973. A contributing factor is that, over the last 20 years, the United States has been a major importer of apparel from developing nations with lower production costs. In contrast, prices for budget items such as medical care, educational expenses, and housing have kept pace or exceeded the all-items category of the Consumer Price Index (CPI).

This article examines various trends related to clothing including prices, expenditures, trade, fiber consumption and end use, new fibers, and other trends in styles and merchandising. Findings provide educators and other professionals with a concise overview of recent developments in clothing and textiles.

Prices

In 1993, prices for apparel commodities, as measured by the CPI, rose 1.2 percent over 1992 (table 1). This annual increase was less than the 3.0-percent increase for all items during the same period. Prices for women's suits (4.7 percent); women's coats and jackets (4.5 percent); and men's suits, sport coats, coats, and jackets (3.5 percent) increased more than prices for other types of apparel.

Between 1980 and 1993, the average annual percent change in prices for all goods and services was 4.4 percent, compared with 2.7 percent for all apparel commodities. The average annual percent change in prices for apparel ranged from 1.9 (women's coats and jackets) to 3.4 (other apparel commodities). Over this period, prices for infants' and toddlers' apparel increased more (3.1 percent annual average) than those for men's and boys' apparel (2.8 percent), women's and girls' (2.5 percent), and footwear (2.5 percent). Since 1973, prices for apparel and upkeep have risen at a slower rate than prices for all consumer items (fig. 1, p. 22). This trend is likely to continue as long as so much of our apparel is imported.

Table 1. Annual percent change in prices of apparel commodities, 1992-93 and average annual change, 1980-93

Group and item	Percent change	
	1992-93	1980-93
All items	3.0	4.4
Apparel commodities	1.2	2.7
Men's and boys'	.8	2.8
Men's	.5	2.9
Suits, sports coats, coats, and jackets	3.5	3.3
Furnishings and special clothing	–.6	3.0
Shirts	–.9	3.0
Dungarees, jeans, and trousers	–.4	2.8
Boys'	1.6	2.1
Women's and girls'	1.7	2.5
Women's	2.0	2.5
Coats and jackets	4.5	1.9
Dresses	1.9	2.5
Separates and sportswear	1.7	2.2
Underwear, nightwear, hosiery, and accessories	.4	3.2
Suits	4.7	3.1
Girls'	–.3	2.5
Infants' and toddlers'	–1.7	3.1
Other apparel commodities	2.1	3.4
Sewing materials, notions, and luggage	.2	NA
Watches and jewelry	2.5	NA
Footwear	.7	2.5
Men's	–.3	3.0
Boys' and girls'	–.2	2.1
Women's	1.9	2.2

NA = Not available.
[1]Consumer Price Index for All Urban Consumers (CPI-U).
Source: CPI Detailed Report, January issues, U.S. Department of Labor, Bureau of Labor Statistics.

Expenditures

Annual spending for clothing and shoes in 1993 was $919 per person (table 2, p. 22). This amount exceeds 1992 spending by $24 per person; about half of this increase may be attributed to higher prices and half to increased buying. When the effect of inflation is removed (indicated by constant dollars in table 2), per capita expenditures for clothing and shoes had regained the level previously attained in 1989. Lower spending levels in 1990 and 1991 probably reflect the recession and lower levels of employment that occurred during these years.

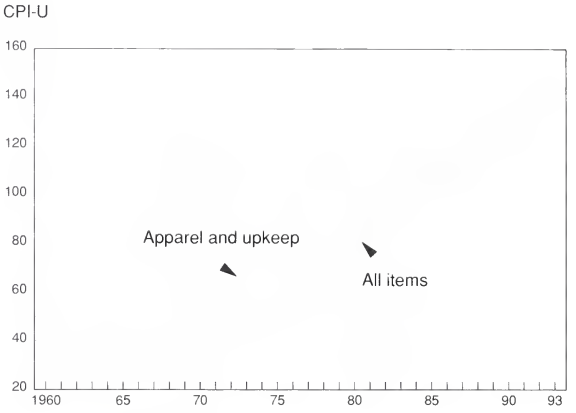
Data from the 1992 Consumer Expenditure Survey (*26*) show that the mean annual expenditure for apparel and apparel products and services by U.S. households was $1,710 (table 3, p. 23). Spending on apparel by households has increased by almost one-third (32 percent) since 1980, when the average annual expenditure for apparel and apparel products and services was $1,299 (1992 dollars). Most of this increase occurred between 1982 and 1984 (fig. 2, p. 24). Since 1984, spending has fluctuated 1 to 6 percent per year, never 2 consecutive years in the same direction.

In 1992, households that spent the most on apparel ($4,098) were those with income of $70,000 or more. Other households that spent in excess of $2,500 on apparel were those with incomes of $50,000 or more and those consisting of a husband, wife, and an oldest child between 6 and 17 years of age. Households that spent less than $1,000 for apparel included those with income less than $20,000 and with a householder 65 years old or older.

Apparel accounted for almost 6 percent of total expenditures by all households. Those that spent at least a 7-percent share on apparel had a householder under 25 years old or had a Black householder. Households that spent the smallest share of total expenditures for apparel were headed by someone age 65 and over (4.3 percent).

An interesting finding concerned region of residence. Households in the Northeast not only had higher apparel expenditures than those in the other regions, they also spent a higher share of their total expenditures for apparel. Northeastern winters may be more severe,

Figure 1. Changes in consumer prices in apparel and upkeep, 1960-93



Source: U.S. Department of Labor, Bureau of Labor Statistics, CPI Detailed Report.

Table 2. Annual expenditures on clothing and shoes,[1] 1988-93

Year	Per capita expenditures[2]		Percent of personal consumption expenditures		Aggregate expenditures	
	Dollars	Constant dollars (1987)	Dollars	Constant dollars (1987)	Billions of Dollars	Billions of constant dollars (1987)
1988	762	732	5.7	5.7	186.4	178.9
1989	812	761	5.7	5.8	200.4	187.8
1990	830	745	5.5	5.7	206.9	185.9
1991	845	732	5.5	5.7	213.0	184.7
1992	895	759	5.5	5.8	228.2	193.7
1993	919	772	5.4	5.8	237.1	199.2

[1]Includes yard goods, but excludes services such as cleaning and repairing clothing and shoes.
[2]Calculated by dividing aggregate expenditures for each year by population figures for July of each year.

Sources: Calculated from U.S. Department of Commerce, Bureau of the Census, 1994, Population Estimates and Projections, Current Population Reports, Series P-25 and U.S. Department of Commerce, Bureau of Economic Analysis, 1992-94, Survey of Current Business, tables 2.2 and 2.3.

requiring seasonal clothing for summer, winter, and the transitional months. Also, business dress for urban areas in the Northeast is less casual—and so more expensive.

On average, U.S. households in 1992 spent over one-third (34 percent) of their apparel and services dollar on clothing for women, 16 years and older. Clothing for men accounted for 22 percent; for children, 15 percent; and footwear, 14 percent. The rest (15 percent) was spent on other apparel products and services (material, patterns, notions; watches, jewelry; clothing rental and clothing storage; dry cleaning and laundry; repair of shoes, apparel, watches, and jewelry).

Compared with these average shares of the apparel and services dollar, some households spent higher or lower percentages on one or more apparel categories. Households with children, as expected, spent a higher portion of their apparel and services dollar on children's clothing: 22 percent in households headed by husbands and wives and 30 percent in single-parent households. Households headed by a person age 45 to 54 spent a higher share (26 percent) than other households on clothing for men. This age group is the one generally considered to have peak job responsibilities. Households in the lowest income quintile and those headed by someone 65 years or older (more likely to be a woman because women live longer than men) allocated more of their clothing dollar (42 percent and 46 percent, respectively) for women's apparel. Many of the same households may belong to both these demographic groups. Rural households spent a lower share (11 percent) than other households on other apparel products and services, whereas those headed by people employed as managers or professionals spent 19 percent—10 percent on jewelry alone. Households headed by a Black person spent a higher portion (18 percent) of their clothing dollar on shoes.

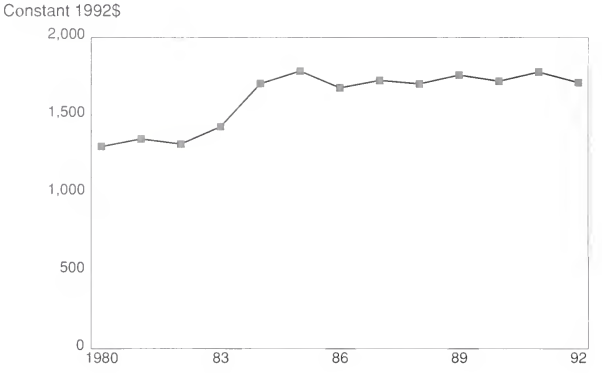
Table 3. Average annual expenditures for apparel and apparel products and services, by demographic characteristics, 1992

Characteristic	Mean dollars	Percentage of total annual expenditures
All households	**$1,710**	**5.7**
Income		
<$10,000	677	5.4
$10,000 - $19,999	982	5.1
$20,000 - $29,999	1,564	6.0
$30,000 - $39,999	1,603	5.1
$40,000 - $49,999	2,267	5.7
$50,000 - $69,999	2,780	5.9
$70,000 and over	4,098	5.9
Composition of household		
Husband and wife only	1,789	5.4
Husband, wife with oldest child <6 years	1,965	5.3
Husband, wife with child 6-17 years	2,573	6.0
Husband, wife with child >17 years	2,423	5.5
Single parent (at least one child under age 18)	1,377	6.6
Housing tenure		
Homeowner	1,933	5.5
Renter	1,334	6.3
Type of area		
Urban	1,761	5.8
Rural	1,395	5.5
Region		
Northeast	2,077	6.7
Midwest	1,637	5.8
South	1,540	5.5
West	1,702	5.1
Head of household		
Age (years)		
<25	1,267	7.3
25 - 34	1,842	6.2
35 - 44	2,210	5.9
45 - 54	2,245	6.0
55 - 64	1,631	5.1
65 and over	882	4.3
Race		
White and other[1]	1,741	5.6
Black	1,468	7.5

[1]Category includes people who are White, American Indian, Aleut, Eskimo, Asian, and Pacific Islander.

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1992, Consumer Expenditure Survey, unpublished data.

Figure 2. Average annual household expenditure for apparel and apparel products and services, 1980-92



Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey.

Trade

U.S. trade in **textiles** continued to expand in 1993 (*22*) as it has every year since 1975. Although before 1982 the value of textile exports frequently exceeded the value of textile imports, since 1982 the United States has had a negative trade balance in textiles. This deficit peaked in 1987 at $4 billion, decreased to $1.8 billion in 1990, and was $3 billion in 1993 (fig. 3) (*2*). In 1993, cotton textiles accounted for 62 percent of the textile trade deficit (*22*).

In contrast, U.S. trade in **apparel** has increased much more rapidly and imports have exceeded exports for the past 20 years. Even though apparel exports began increasing in 1988, the trade deficit in apparel has grown each year except 1991, reaching over $30 billion in 1993 (*2*). Apparel accounted for 91 percent of the textile and apparel deficit in 1993 (*2*). Apparel imports constituted an estimated 68 percent of the U.S. apparel market in 1993, compared with 48 percent in 1985 and 28 percent in 1980 (*1*). In 1993, most of U.S. textile and apparel imports came from China, Taiwan, Canada, Hong Kong, and South Korea (*2*).

The top three textile and apparel items exported by the United States in 1993 were nylon carpets, denim trousers, and cotton trousers (*1*). Leading importers of these and other textile and apparel products were Canada and Mexico with Japan a distant third (*2*). When the North American Free Trade Agreement (NAFTA)[1] went into effect January 1, 1994, the following exports to Mexico became duty-free immediately: blue denim fabric, upholstery velvets, terry cloth towels, sewing thread, and cotton underwear (*2*). As a result, in the first 3 months of the NAFTA agreement, exports of textiles and apparel to Mexico increased by 24 percent (*1*). Trade with our North American partners will most likely continue to expand.

[1]The North American Free Trade Agreement eliminates trade and investment barriers between the United States and Mexico over the next 15 years; it also modifies the United States-Canada free trade agreement that has been in effect since January 1, 1989. All tariffs on goods produced and sold in North America will eventually be eliminated (*20*).

Fibers

Consumption

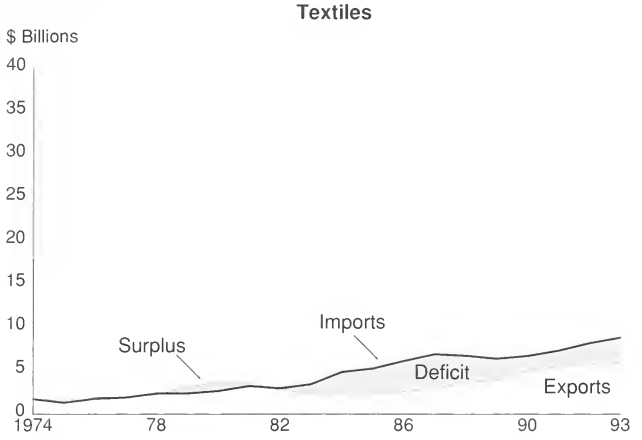
Since 1984, domestic fiber consumption in the United States has increased, on a per capita basis, from 55.4 pounds to 76.0 pounds in 1993—a 37-percent increase. These figures include the raw fiber equivalent of net U.S. trade in textile products (*22,23,24*). Net textile imports accounted for almost 22 percent of domestic consumption in 1993 (*25*). Per capita consumption of cotton increased the most during this period, from 16.8 to 29.3 pounds—a 74-percent increase (table 4, p. 26) (*22,23,24*). In 1993, U.S. per capita cotton consumption was at the highest level since 1951. Net cotton textile imports accounted for almost 35 percent of cotton domestic consumption in 1993 (*25*).

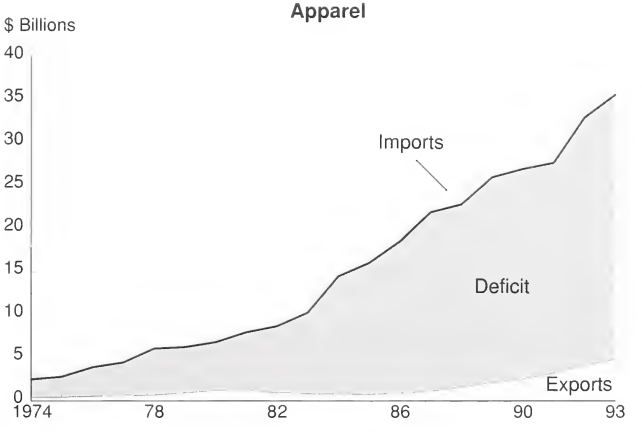
U.S. fiber consumption generally follows changes in personal consumption expenditures and the gross domestic product (GDP) (*21*). In particular, a strong housing market stimulates sales of carpeting, furniture, and home furnishings (*2*). Sustained economic growth in 1994 would support continued growth in fiber consumption (*21*).

End Use

U.S. manufacturers used about 15-1/2 billion pounds of cotton, wool, and manufactured fibers in goods for consumers in 1992 (*4*). Of this total, 38 percent was used for apparel (table 5, p. 26). Apparel accounted for 62 percent of the cotton, 66 percent of the wool, and 49 percent of the cellulosic manufactured fiber used. Home textiles and floor coverings required 37 percent of total fibers, with 29 percent of cotton used for home textiles and 35 percent of noncellulosic manufactured fibers used for floor coverings.

Figure 3. U.S. trade in textiles and apparel, 1974-93





Source: American Textile Manufacturer Institute, Office of the Chief Economist, 1994, Textile HiLights, March issue.

In 1992, about 64 percent of the raw fiber used in consumer products was manufactured, 35 percent was cotton, and 1 percent was wool (*4*). Comparable figures for 1981 were: 74 percent manufactured, 24 percent cotton, and 2 percent wool (*3*).

During 1992, over half of the fiber used in U.S. apparel (56 percent) and home textiles (63 percent) was cotton (*4*). Table 6, p. 27, shows that the use of cotton in apparel has been steadily increasing over the past 16 years. In contrast, the use of manufactured—especially noncellulosic—fibers in apparel has been decreasing.

Recent Developments (*10*)

Polyester fibers that have been produced from recycled plastic soda bottles are chemically and physically comparable to other polyesters. Recycled fibers have been used for T-shirts, fleece outerwear garments (*12,14*), sweaters, and carpets (*8*). Retail prices for finished garments are similar to those made from virgin polyester (*8*).

Trevira II Polyester is a blend of at least 50 percent postconsumer recycled polyester, including PET (polyethylene terephthalate) soda bottles and virgin polyester. Trevira II may be used in fleece and velour outerwear garments.

Fortrel Ecospun, a polyester fiber, is certified as made of 100 percent postconsumer PET plastic bottles. The fiber passes all testing standards—for strength, shrinkage, and color fastness. A double-sided velour fleece has been used for rugged outerwear. Ecospun is priced competitively with other polyester fibers (*14*).

Fox Fibre is a cotton developed from wild cotton seeds that produced brown cotton. Cross-bred with long staple cotton, Fox Fibre is a machine-spinnable, naturally colored fiber available in shades of mocha brown, brick red, and green. Because no dyes or bleaches are used, toxic wastes are eliminated,

Table 4. U.S. fiber consumption: Per capita domestic consumption, by type of fiber, 1984-93

Year	Total	Cotton	Wool	Manufactured	Flax/Silk
			Pounds		
1984	55.4	16.8	1.4	37.2	NA
1985	57.9	17.7	1.5	38.7	NA
1986	65.2	20.3	1.6	40.7	2.6
1987	70.3	23.7	1.6	42.1	2.9
1988	67.2	21.5	1.4	41.8	2.5
1989	68.1	23.6	1.0	40.5	3.0
1990	65.3	23.5	1.1	37.8	2.9
1991	66.0	24.6	1.2	37.5	2.7
1992	72.5	27.8	1.2	40.9	2.6
1993	75.9	29.3	1.3	42.6	2.8

NA = Not available.

Source: U.S. Department of Agriculture, Economic Research Service, 1988-94, Cotton and Wool Situation and Outlook Report, CWS-76,66,51.

but this makes Fox Fibre more expensive than traditionally grown cotton.

Tencel is the first new fiber to be developed in the last 30 years. Made from cellulosic fibers of wood pulp using a new spinning technique to give added strength, the fiber is significantly stronger than other cellulosic fibers, such as cotton and rayon. Tencel is washable with low shrinkage, a soft hand, desirable draping qualities, luster, and vibrant colors.

Winston Natural Wool is chemical- and dye-free and available in a range of 49 shades of white, cream, tan, brown, gray, and black. Wool from a variety of sheep is blended together in different proportions of light and dark fibers to achieve color control.

Apparel made from yarns of microfibers—alone or mixed with regular denier filaments—is now available. The mixed denier product is more expensive but is suitable for a wider variety of garments, such as sportswear, dresses, loungewear, and men's wear (*13*). Straight microfiber yarns are typically used in luxury-grade, easy-care hosiery and intimate apparel (*11,14*).

Table 5. Distribution of fibers by end-use, 1992

Use	All fibers	Cotton	Wool	Manufactured	
				Cellulosic[1]	Noncellulosic[2]
			Percent		
Total end-use consumption	100	100	100	100	100
Apparel	38.4	61.7	66.4	48.6	23.5
Home textiles	16.1	28.9	5.1	17.2	8.8
Floor coverings	21.3	0.4	12.0	0	35.0
Industrial and other consumer-type products	20.3	6.0	6.0	28.1	28.5
Exports of domestic products	3.9	3.0	10.5	6.1	4.2

[1]Cellulosic fibers are formed from a solution of cellulose matter found in the cell walls of plants.
[2]Noncellulosic fibers are formed from a chemical solution.

Source: Fiber Economics Bureau, Inc., 1993, Fiber Organon 64(9):180.

Other Trends in Styles and Merchandising

Clothing manufacturers appear to be considering the changing demographics of the American market. As the baby-boomer generation ages, it is likely that longer styles will become more popular as will knits and garments that are cut for a fuller figure (*14*). Multiple-use apparel has gained favor: innerwear used as outerwear; sportswear used as sleepwear (*14*). The dress code at the office has become more casual, and those who are self-employed or employed at home have less need for typical business attire (*11*). Worldwide, there has been an unexpected decline in the consumption of pantyhose (*15*). In the last 5 years, shipments of pantyhose to stores has decreased by 21 percent (*9*). Women are wearing jeans and pants for more occasions and opaque styles of pantyhose provide longer wear (*15*). Taken together, these trends indicate that a continued decline in the budget share attributed to clothing is likely.

Several large department stores have announced plans to sell merchandise via interactive cable TV, including Nordstrom and R.H. Macy. Macy's intends to start a cable television channel that will operate daily, selling apparel and home furnishings that are carried in its stores (*17,18*). Encouraged by the North American Free Trade Agreement, retailers are expanding operations into Mexico and Canada. Those already proceeding include Price Club, Wal-Mart, K Mart, Burlington Coat Factory, and J.C. Penney (*16*).

Summary and Conclusions

Demographic characteristics that appear to affect household expenditures for apparel include: income (higher in households with income exceeding $50,000 and lower in households with income less than $20,000), household composition (higher in married-couple families with children age 6 and over), age of the household head (higher in households headed by a person between 35 and 54 years old and lower in households headed by a person 65 years and over), and region (higher in Northeastern households).

Trends related to textiles and apparel that were described in this article include: slowly rising consumer prices, stable (since 1984) household expenditures, an increasing trade deficit in apparel, increasing per capita consumption of fibers—especially cotton, and a decreasing use of noncellulosic manufactured fibers in apparel.

The outlook is for continued moderation in clothing price increases so long as apparel imports account for a larger and larger share of the U.S. apparel market. Apparel made with environmentally friendly fibers is expected to find favor with consumers, but cotton garments are likely to remain the top choice. Overall, lifestyles in the 21st century will probably permit a more casual approach to dress, where comfort and convenience take precedence over high style.

Table 6. Distribution of fibers used in apparel, 1977-92

Year	Cotton	Wool	Manufactured fibers	
			Cellulosic[1]	Noncellulosic[2]
1977	33.8	2.6	5.9	57.7
1978	33.5	2.8	6.1	57.6
1979	35.2	2.7	7.1	55.0
1980	35.2	2.7	6.3	55.8
1981	36.0	3.4	7.0	53.6
1982	38.6	3.2	5.3	52.9
1983	36.1	3.4	5.0	55.5
1984	39.1	3.9	5.5	51.5
1985	43.9	3.2	4.6	48.3
1986	45.6	3.1	5.0	46.3
1987	49.9	2.8	4.2	43.1
1988	48.7	2.7	5.3	43.3
1989	51.2	2.2	5.0	41.6
1990	55.7	2.3	5.5	36.5
1991	56.9	2.6	5.0	35.5
1992	56.3	2.4	4.6	36.7

[1]Cellulosic fibers are formed from a solution of cellulose matter found in the cell walls of plants.
[2]Noncellulosic fibers are formed from a chemical solution.

Source: Fiber Economics Bureau, Inc., 1984-1993, Fiber (Textile) Organon, September issues, Table 2.

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Gifts for Home Purchase

Many first-time home buyers have difficulty saving enough money for the down payment and closing costs required. Gifts from relatives can make it easier. Using data from an annual survey sponsored by the Chicago Title and Trust Company, this study reports the frequency and magnitude of family gifts for the purchase of a house and explores the pattern of gift receipts using a sample of mortgage applicants. The sample includes about 2,000 households in 18 major metropolitan areas. The purpose of the study was to determine whether the timing and magnitude of these gifts were related to economic limitations faced by the receiving household.

Most gifts or loans by a relative are intergenerational and either altruistic in nature or exchange-motivated. Mortgage lenders tend to view gifts favorably in that they indicate a familial safety net—the household is less likely to default and forgo the family's investment or, if the household's cash flow is interrupted, the family may financially support the household in distress. It was found that, controlling for other information on the mortgage application, applicants with a gift were less likely to be rejected.

Down-payment requirements on conventional mortgages range from 5 to 20 percent of the price of the home. Points, closing costs, and mortgage insurance add significantly to the amount a buyer must accumulate. Because a large down payment reduces the loan amount and the mortgage payment, the mortgage income requirements are lower so households can qualify for a higher priced home than they could otherwise afford.

Low down payment, government-insured home loans are available through agencies such as the Federal Housing Administration (FHA) or the Veterans Administration (VA). These loans have strict maximums that have effectively limited their use to the South and Midwest, where nominal house prices are low. In cities located on the East and West coasts, older buyers and higher house prices and appreciation rates were positively related to the fraction of the down payment that was in the form of a gift. In the noncoastal cities located in the South and Midwest, none of these factors had any significant effect on gift receipt.

Of the 18 metropolitan areas surveyed by Chicago Title and Trust, the three with the highest median-priced houses in 1992 were in California—San Francisco ($254,800), Orange County ($234,900), and Los Angeles ($213,200) (see table). Gifts from relatives were more important in these three areas than anywhere else in the country, ranging from 18 to 22 percent of the down payment. In the other surveyed cities, however, no positive correlation existed between gifts and house prices.

A positive relationship was found between the average number of years required to save for a down payment and the gift percentage of the down payment for residents of the nine cities with higher median housing prices. It may be necessary for households in these areas to save for a long time **and** to receive help from relatives to afford a first home. An inverse correlation was found between time to save and family help for households in the nine less costly cities. In these cities, it appears that the receipt of gifts shortens the time necessary to save for a down payment.

Data from a sample of mortgage applications in Boston in 1990 were used to estimate the probability of receiving a gift as part of the down payment. First-time buyers and repeat buyers who

First-time buyers, 18 cities, 1992

City	Median price ($)	First-time buyer: Median purchase price ($)	First-time buyer: Median income ($)	First-time buyer: Years to save	First-time buyer: Gift percent of down payment	First-time buyer: Down payment percent of price
San Francisco	254,800	211,100	61,800	3.0	18.2	16.8
Orange County	234,900	168,100	63,900	3.4	22.1	12.4
Los Angeles	213,200	183,600	59,200	4.8	20.4	15.7
New York	172,700	148,100	60,200	4.2	12.6	24.6
Boston	171,100	144,000	57,100	3.7	8.7	17.0
Washington	157,800	130,000	66,700	2.7	10.2	14.2
Seattle	145,700	114,300	51,300	2.3	15.5	14.3
Chicago	136,800	112,900	47,400	2.9	13.8	15.3
Philadelphia	117,000	103,600	47,200	2.8	8.6	14.7
Denver	96,200	82,400	39,400	1.9	16.7	11.7
Atlanta[1]	95,600	91,400	50,800	2.5	12.4	11.0
Minneapolis	94,300	89,300	46,400	2.0	15.5	11.9
Dallas/Fort Worth	91,300	92,200	46,400	1.9	17.9	15.7
Cleveland	90,700	70,100	41,000	2.4	8.5	16.2
Orlando	87,600	81,600	40,600	2.1	12.4	16.4
Phoenix	86,800	76,800	47,800	1.4	14.6	12.6
Memphis	85,300	73,700	39,400	2.2	7.0	17.2
Detroit	81,300	75,300	52,800	2.6	15.2	14.1

[1]The Atlanta median price was based on the 1991 median price, updated to 1992.

Source: National Association of Realtors; Chicago Title and Trust Co., Who's Buying Houses in America, 1992.

received gifts were younger and had more years of education and fewer dependents. They had smaller incomes and net worth, had shorter employment histories, and were more likely to have a history of delinquent credit. Also, households with higher loan-to-value ratios (less money put down) were more likely to receive gifts for the down payment. Gifts for home purchase were less frequent for repeat buyers; 22 percent of first-time buyers received gifts, whereas only 9 percent of repeat buyers did.

In conclusion, about 1 in 5 first-time home buyers received some help from relatives in making the down payment, with the average gift to those receiving help roughly one-half of the total down payment. This evidence suggests that gifts for home purchases may be an important fraction of aggregate private transfer activity.

In 1992, the value of family transfers for down payments was estimated at $2.5 billion for first-time buyers and $1.9 billion for repeat buyers, for a total of $4.4 billion. Because the annual flow of noneducational, nonbequest intergenerational transfers was about $71 billion, transfers for down payments accounted for about 6 percent.

Source: Engelhardt, G.V. and Mayer, C.J., 1994, Gifts for home purchase and housing market behavior, *New England Economic Review*, May/June issue.

Income and Spending Patterns of Single-Mother Families

Single-mother families are an increasing proportion of all family groups with children. In addition, there has been a dramatic shift in the marital status of single mothers. In 1970, 69 percent of single-mother families were maintained by divorced or separated women, 23 percent by widows, and 8 percent by never-married women. By 1992, the proportion of single-mother families maintained by divorced, separated, or widowed women decreased, while those maintained by never-married women increased to 38 percent.

Using data from the interview component of the 1989-91 Consumer Expenditure Survey, this study examines the economic status of single-mother families by the mothers' marital status, focusing on income and expenditures. Families maintained by divorced/separated, never-married, and widowed women are also compared with married-couple families.

Characteristics

The average age of single mothers ranged from 29 to 44, varying with their marital status. Never-married mothers were younger, and widows were older. The average family size ranged from 2.9 to 3.2, denoting an average of two children among the three groups of single-mother families. Average age of the youngest child was highest in families maintained by widows and lowest in families maintained by never-married mothers. The majority of divorced/separated and widowed mothers were White. In contrast, a high percentage (63 percent) of never-married mothers were non-White. Single mothers had less formal education than married mothers.

Sources of Income

Wages or salary was the most often received income source of families maintained by divorced/separated mothers and widowed mothers as well as for married-couple families (table 1). The most often received income source of families maintained by never-married mothers was food stamps; 65 percent had food stamp income, whereas 55 percent had wage or salary income.

Public assistance was received by 55 percent of families maintained by never-married mothers. Social Security income was received by 65 percent of families maintained by widows. Under the Social Security system, a household with a dependent child from a deceased parent is eligible for Social Security survivors' benefits.

Income from alimony, child support, or regular contributions was received by 42 percent of families maintained by divorced/separated mothers and 16 percent of those maintained by never-married mothers. Many single mothers with children are not awarded child support and when they are, the full amount is often not paid. A small proportion of married-couple families received alimony, child support, or regular contributions. This probably indicates a parent/step-parent situation.

Average Income

Before-tax income of families maintained by widows averaged $22,790; those maintained by divorced/separated women, $18,580; and those by never-married mothers, $9,820 (table 2). Income for families maintained by married couples averaged $43,130. The incomes of the family groups examined do not include the value of noncash benefits such as medicaid and public housing. Such benefits would raise the effective income of these families, especially single-mother families who are more likely to receive these benefits, given their lower incomes.

Table 1. Percentage of single-mother and married-couple families with children, by income source, 1989-91

Income source	Single mothers			Married couples
	Divorced/ separated	Never married	Widowed	
Wages or salary	81	55	72	95
Alimony, child support, or regular contributions	42	16	11	6
Public assistance	20	55	6	3
Interest or dividends	15	3	29	34
Food stamps	26	65	13	5
Social Security	4	2	65	2
Other[1]	18	16	40	31

[1]Includes income from pensions, Supplemental Security income, unemployment compensation, and owned businesses.

Source: Lino, M., 1994, Income and spending patterns of single-mother families, Monthly Labor Review 117(5):29-37.

Table 2. Income of single-mother and married-couple families with children, 1989-91

Income source	Single mothers			Married couples
	Divorced/ separated	Never married	Widowed	
Before-tax income	$18,580	$9,820	$22,790	$43,130
Per adult equivalent	11,060	5,810	12,880	17,120
After-tax income	17,430	9,710	21,180	39,160
Per adult equivalent	10,375	5,750	11,970	15,540
Before-tax income:[1]		*Percent*		
Wages or salary	76.3	52.6	59.6	87.0
Alimony, child support, or regular contributions	9.3	2.3	2.2	.5
Public assistance	4.2	23.8	1.0	.2
Interest or dividends	.7	.4	8.9	1.2
Food stamps	3.0	14.8	.8	.2
Social Security	1.1	.9	20.9	.5
Other[2]	5.4	5.2	6.6	10.4

[1]All families with and without income from a particular source were used to calculate percent shares from that source.
[2]Includes income from pensions, Supplemental Security income, unemployment compensation, and owned businesses.

Source: Lino, M., 1994, Income and spending patterns of single-mother families, Monthly Labor Review 117(5):29-37.

Wages and salaries accounted for the largest proportion of before-tax income for families maintained by single-mothers regardless of marital status. Overall, 81 percent of divorced/separated mothers were employed full or part time, as were 69 percent of widows and 73 percent of married mothers. Only 52 percent of never-married mothers were employed.

For families maintained by divorced/ separated mothers, each of the other sources of income made up less than 10 percent of before-tax income. Alimony, child support, and regular contributions accounted for 9 percent of annual income. Families maintained by never-married mothers received their second largest share of before-tax income from public assistance followed by food stamps. Alimony, child support, and regular contributions made up only 2 percent of income for these families. For families maintained by widows, Social Security accounted for 21 percent of before-tax income.

Expenditures Incurred

All single-mother families had expenditures for housing and food. Never-married mothers were least likely to have expenses for food away from home. Expenses for transportation were incurred by a smaller percentage of families maintained by never-married mothers. This is likely related to vehicle ownership among these families. Sixty-five percent of families maintained by never-married mothers did not own a vehicle. By comparison, 23 or 24 percent of families maintained by divorced/ separated mothers or widows and only 3 percent of those maintained by married couples did not own a vehicle.

One-third of families maintained by never-married mothers had out-of-pocket health care expenses. Although some families maintained by never-married mothers may receive free medical care through government programs, such as medicaid or through nonprofit organizations, there are still some who may go without medical care.

Child-care expenses were incurred by a smaller proportion of families maintained by never-married mothers and widows, compared with families maintained by divorced/separated mothers and married couples. The much lower percentages of each family type having child-care expenses, compared with the respective percentages of employed mothers may seem surprising. A large proportion of child care, however, is provided by relatives, who are likely not paid. Children in single-parent families are also more likely to be latchkey children.

Expenditures by Budgetary Component

Overall expenditures averaged $22,280 for families maintained by widows, $19,770 for those maintained by divorced/ separated mothers, and $10,920 for those maintained by never-married mothers. By comparison, total expenditures of married-couple families averaged $35,780. For the three groups of single-mother families, total expenditures exceeded their after-tax income. It is possible that single-mother families may underreport their income, incur debt to cover expenses, or report expenses paid by others.

Housing constituted the largest share of total expenditures in both single-mother and married-couple families. Home ownership varied widely among the various family groups; 74 percent of married couples and 72 percent of widows owned their own home, compared with 37 percent of divorced/separated mothers and 9 percent of never-married mothers.

Food made up the second largest share of total expenses for single-mother families, and transportation was third. Transportation was the second largest share for married couples. Clothing accounted for 5 to 7 percent of total expenses among the various family types. Health care expenses, which only include out-of-pocket expenses, varied from 2 percent of total expenses for families maintained by never-married mothers to 6 percent for families maintained by widows. Child care accounted for 1 to 2 percent of total expenses; however, these proportions are somewhat misleading, as the majority of families did not have such expenditures.

Conclusion

Among single-mother families, those maintained by never-married mothers are a growing percentage and are most likely to be economically disadvantaged. The poorer economic status of families maintained by never-married mothers may be exacerbated by the average age of mothers in these families, which is much younger than in the other groups of single mothers. Whether the economic status of these families will improve as the mothers become older—and presumably gain more job skills and seniority—is unknown. The prospects do not seem encouraging, however, as 39 percent of never-married mothers do not have a high school diploma and only about half are in the labor force.

Source: Lino, M., 1994, Income and spending patterns of single-mother families, *Monthly Labor Review* 117(5):29-37.

Characteristics of Self-Employed Women

Data from the March 1976 and March 1991 Current Population Surveys and Income Supplements were used to describe self-employed women in the United States. Comparisons are made between self-employed women in 1990 and those in 1975, between self-employed women and their wage-and-salary counterparts, and between self-employed women and self-employed men.

During the mid-1970's, the incidence of self-employment in the nonagricultural sector of the U.S. economy[1] began to increase, after a long period of decline. The number of workers who were self-employed in their primary jobs increased by 74 percent between 1975 and 1990, while total employment increased by 33 percent. The self-employment rate (self-employment as a percentage of total employment in the nonagricultural sector) increased from 7.4 percent to 9.7 percent. Women accounted for 24 percent of the self-employed in 1975, compared with 32 percent in 1990.

Demographic Characteristics

Race and Hispanic Origin. Most (92 percent) self-employed women in 1990 were White (94 percent in 1975). Less than 4 percent of all self-employed women were Black, although Blacks accounted for 12 percent of all female wage-and-salary workers. Of all self-employed women, 4 percent were of Hispanic origin and 4 percent were of other races. Black women had substantially lower self-employment rates than did White, Hispanic, and other women during the 1975-90 period.

[1]Self-employment in agriculture is not included in the data described in this article.

Age. The mean age of self-employed women in 1990 was 43.4 years, compared with 36.4 years for wage-and-salary female workers (44.1 and 35.6 years in 1975). Half of all wage-and-salary female workers were age 34 and under, compared with about one-fourth of self-employed females. The highest self-employment rate (15 percent) was for women age 65 and over (12 percent in 1975), although the total number of employed women in this age group was low. The age pattern for employed men was similar to that of women.

Marital Status. Three-fourths of self-employed women in 1990 were married and living with their spouse (73 percent in 1975), compared with 54 percent of female wage-and-salary workers (58 percent in 1975). Never-married women represented just 7 percent of self-employed women but 26 percent of all female wage-and-salary workers (24 percent in 1975).

Education. In 1990, self-employed women had slightly more years of education completed (13.3 years), on average, than did female wage-and-salary workers (13.0 years). They were also more likely to have at least 4 years of college (25 percent versus 22 percent). Although mean levels of educational attainment for men and women were similar in the wage-and-salary sector, self-employed men had higher educational attainment levels than did self-employed women.

Weeks Worked and Usual Hours

Full-time work is defined as 35 or more hours per week, 50 or more weeks a year. The percentage of self-employed women working full time increased steadily from 50 percent in 1975 to 60 percent in 1990. However, about 70 percent of female wage-and-salary workers were employed full-time during the entire 1975-90 period.

Number of weeks worked per year in 1990 was nearly identical for self-employed females and their wage-and-salary counterparts (about 44 weeks). Men typically worked 3 to 4 additional weeks per year.

Occupations

Although the proportion of female wage-and-salary workers in executive, administrative, and managerial occupations doubled from 5 percent in 1975 to 10 percent in 1990, it remained low relative to the 17 percent of self-employed women in these occupations. Self-employed women were more likely than those in wage-and-salary jobs to be in sales occupations (20 percent versus 13 percent) and less likely to be in administrative support occupations (12 percent versus 29 percent).

Industry

A higher percent of self-employed women (58 percent in 1990, 57 percent in 1975) than those in wage-and-salary jobs (49 percent in 1990 and 47 percent in 1975) were working in service industries (excluding finance, insurance, and real estate). Men were less likely than women to work in service industries in 1990 and in 1975, whether self-employed or in wage-and-salary jobs.

Between 1975 and 1990, however, the industrial composition of women's self-employment shifted among service industries. In particular, there was a dramatic shift out of personal services (such as beauty and dressmaking shops) and a major shift into business and repair services. Whereas 22 percent of self-employed women remained in personal services, only 4 percent of self-employed men did so.

Incorporated Business Status

The incidence of incorporated self-employment remained low for women, relative to men, throughout the 1975-90 period. However, the percentage of all self-employed women who were in incorporated businesses rose from 8 percent to 18 percent. Incorporated self-employed women tended to have more education and were less likely to be Black. Incorporated self-employed women were much more likely than their unincorporated counterparts to be employed in construction and manufacturing industries and much less likely to be employed in personal services. In retail trade industries, the percentage of women in incorporated self-employment decreased from 43 to 28 percent between 1975 and 1990. In business and repair services, the percentage of women in incorporated self-emloyment increased from 5 to 16 percent during this period.

Earnings

Median real earnings for self-employed women increased between 1975 and 1990, both absolutely and relative to the earnings of their wage-and-salary counterparts. However, self-employed women had median annual earnings that were only 56 percent those of female wage-and-salary workers.

In 1990, self-employed women who were incorporated earned 28 percent more than their wage-and-salary counterparts. Median annual earnings for incorporated self-employed women were almost three times those for unincorporated self-employed women.

The earnings of self-employed women improved over time, relative to the earnings of self-employed men. The female/male annual earnings ratio reached 0.28 for self-employed workers in 1990, up from 0.15 in 1975.

Health Care Coverage

Self-employed women were less likely than their wage-and-salary counterparts to have some type of health care coverage, 83 percent compared with 87 percent. About 1 in 8 self-employed women with health care coverage received it through their own jobs, whereas half of female wage-and-salary workers with coverage had plans through their jobs. One-third of self-employed men had job-related health care coverage.

Children

The percentage of employed women with children under age 6 in the household was very similar for self-employed and wage-and-salary workers in both 1975 and 1990. Over time, the most striking change with respect to the presence of young children occurred among women who were self-employed in incorporated businesses. In 1990, 13 percent of these women had young children in the household, compared with only 7 percent in 1975.

Husband's Employment Status

The percentage of self-employed women in husband-wife households with self-employed spouses increased from 29 percent in 1975 to 40 percent in 1990. In addition, husbands of self-employed women were less likely than husbands of wage-and-salary wives to experience unemployment during the year.

Source: Devine, T.J., 1994, Characteristics of self-employed women in the United States, *Monthly Labor Review* 117(3):20-34.

Fat and Cholesterol Awareness

For several decades, American consumers have been advised to reduce their intakes of total fat, saturated fat, and cholesterol to decrease the risks of coronary heart disease. Eating less fat can also lower the risk of cancer and obesity. In response to this advice, consumers report eating less red meats, fried foods, fats, and oils, and more fish and poultry. However, two USDA studies suggest that changes in food consumption patterns do not necessarily result in lower intakes of fat. For example, study participants traded fat from one source for another, such as from red meats to dairy products and grain-based mixtures (such as pizza), with little net effect on overall intake of fat.

Two nationwide surveys were conducted that compare consumers' actual food intake with their awareness of diet and health and assess their knowledge, attitudes, and self-rating of own diets. The 1989 and 1990 Continuing Survey of Food Intakes by Individuals (CSFII) asked household members for detailed information on what they ate for 3 consecutive days as well as personal information, such as income, race, education, and health status. The Diet and Health Knowledge Survey (DHKS), also conducted in 1989 and 1990, assessed attitudes and knowledge of the main meal planner/preparer in each CSFII household about the *Dietary Guidelines for Americans*, nutrition, and diet and health relationships. Results were based on the 513 men and 2,367 women who were the main meal planners/preparers for their households, who completed the DHKS, and who provided information on their food intake for 3 days in the CSFII.

The DHKS asked, "Have you heard about any health problems that might be related to ...(how much fat a person eats, how much saturated fat a person eats, how much cholesterol a person eats)?" More respondents were aware of health problems associated with cholesterol than were aware of problems associated with fat or saturated fat. Since intake of saturated fats has a bigger impact on blood cholesterol levels than does intake of either total fat or cholesterol, this finding has important implications for nutrition education programs.

Awareness of the relationships between health and how much fat, saturated fat, and cholesterol is eaten was similar for both male and female respondents. For fat and saturated fat, awareness levels were lower for respondents under age 30 than for older respondents. For fat, saturated fat, and cholesterol, awareness levels increased with education and income levels, and were higher among Whites than among Blacks.

The *Dietary Guidelines for Americans* recommends that 30 percent or less of calories be from fat and less than 10 percent of calories be from saturated fat. Three-quarters of the respondents exceeded these recommendations for both fat and saturated fat (see table). Health authorities recommend less than 300 mg of cholesterol per day for both men and women. Nearly 80 percent of female respondents, compared with less than 50 percent of male, met the recommendation for cholesterol. Men generally eat more food and calories than women do, so their average cholesterol intake is higher than women's.

Respondents 50 years and older were more likely than younger respondents to meet the dietary recommendations for fat, saturated fat, and cholesterol.

Whites did better than Blacks in meeting the dietary recommendation for cholesterol, but not for fat or saturated fat. No clear relationship was found between education or income and meeting the recommendations. In general, respondents who were aware of diet-disease relationships were not more likely than others to meet the recommended intakes for fat, saturated fat, or cholesterol.

When asked to compare the levels of fat, saturated fat, and cholesterol in their own diet with "what is most healthful," both men and women tended to underestimate the amount of fat and saturated fat in their diets and overestimate the amount of cholesterol. Only one-fourth of the respondents met the recommendations for fat and saturated fat (see table), although 41 percent thought the level of fat in their diets was "about right," and 49 percent thought their level of saturated fat was "about right." Nearly three-fourths met the recommendation for cholesterol, although only about half thought their diets were "about right" for cholesterol.

The presence of a health condition has been found to play an important role in increasing awareness of diet-disease relationships and bringing about changes in dietary patterns. Having a health condition for which a low-fat/low-cholesterol diet may be recommended (high blood cholesterol, heart disease, cancer, and stroke) was positively associated with being on a special low-fat/low-cholesterol diet. Among those with heart disease, 28 percent said they were on a low-fat/low-cholesterol diet, compared with 7 percent of those without heart disease. Among those with high blood cholesterol, 32 percent were on a special low-fat/low-cholesterol diet, compared with 5 percent of those without high blood cholesterol.

Consumers meeting dietary recommendations for total fat, saturated fat, and cholesterol, 1989-90

Characteristics	Total fat	Saturated fat	Cholesterol
	Percent of meal planners		
Overall average	24	25	73
Gender			
Women	23	26	79
Men	24	22	49
Age group (years)			
<30	25	25	67
30 - 49	19	18	69
50+	29	34	81
Education			
Less than high school	25	28	72
Completed high school	22	23	74
More than high school	25	25	72
Income level (percent of poverty line):[1]			
130 and less	25	24	75
131 - 185	24	31	78
186 - 350	27	29	70
Over 350	21	22	72
Race:			
White	23	25	75
Black	20	23	61
Diet-disease awareness:			
Fat-disease relationship			
Aware	23	25	73
Not aware	26	25	73
Saturated fat-disease relationship			
Aware	23	26	72
Not aware	25	25	75
Cholesterol-disease relationship			
Aware	23	25	73
Not aware	27	29	69

[1]The poverty line adjusts household income for household size and composition. In 1989, the average poverty threshold for a household of four was $11,669. The Food Stamp Program uses 130 percent of the poverty line as the cutoff for its income eligibility criteria; the Women, Infants, and Children (WIC) Program uses 185 percent of the poverty line as the cutoff for its income eligibility criteria.

Source: Frazao, B. and Cleveland, L., 1994, Diet-health awareness about fat and cholesterol—Only a start, FoodReview 17(1):15-22.

Unfortunately, two-thirds of those on a low-fat/low-cholesterol diet consumed more than 30 percent of their calories from fat, and over half consumed more than 10 percent of their calories from saturated fat. Respondents' lack of nutrition knowledge may be hampering their efforts to consume a diet low in fat, saturated fat, and cholesterol.

The DHKS asked several questions to measure knowledge about the fat and cholesterol content of food and other general knowledge about fat and cholesterol. On average, total knowledge was higher among women and Whites, and increased with age, education, and income. Those with higher knowledge scores were more likely to meet the recommendations for saturated fat and cholesterol but not for total fat.

Under a new Federal law, manufacturers of most processed foods are now required to use nutrition labels that provide information on the level of fat, saturated fat, and cholesterol in one serving of that food. This will help consumers who want to improve their diets and may encourage food manufacturers to provide more healthful food choices.

Source: Frazao, B. and Cleveland, L., 1994, Diet-health awareness about fat and cholesterol—Only a start, *FoodReview* 17(*1*):15-22.

Recent Legislation Affecting Families

Public Law 103-296 (enacted August 15, 1994)—the Social Security Administrative Reform Act removes the Social Security Administration (SSA) from the Department of Health and Human Services and establishes it as an independent agency with administrative responsibility for Social Security and Supplemental Security Income (SSI). The SSA would continue to have a Commissioner oversee day-to-day activities, with a bipartisan seven-member Advisory Board. The law also makes other improvements in the old-age, survivors and disability insurance program.

Public Law 103-297 (enacted August 16, 1994)—the Consumer Protection Telemarketing Act strengthens the authority of the Federal Trade Commission (FTC) to protect consumers in connection with sales made with a telephone by establishing rules to prohibit deceptive, fraudulent, and abusive telemarketing practices. The law also allows State prosecutors to cross State lines in tracking down telemarketing scam artists and to enforce the FTC rules in Federal court. In addition, individuals who have lost more than $50,000 can sue the telemarketer.

Public Law 103-322 (enacted September 13, 1994)—the Violent Crime Control and Law Enforcement Act of 1994 establishes a $30.2 billion crime trust fund to pay for authorized programs: $8.8 billion over 6 years to hire 100,000 new police officers; $9.7 billion to cover State construction grants for prisons and boot camps and to reimburse States for the costs of incarcerating illegal aliens who commit crimes; $6.9 billion for programs that aim to prevent crime; and $4.8 billion for other crime programs. The law bans the manufacture and possession of 19 assault weapons for 10 years and authorizes the death penalty for dozens of existing or new federal crimes, such as treason, kidnapping that results in death, or murder of a federal law enforcement official. The law allows police to notify the community into which a sex offender is to be released, mandates life imprisonment for a third violent felony, and allows juveniles age 13 or older to be tried as adults in the federal court system for certain violent crimes. Last, the law provides a potential waiver from existing federal mandatory minimum sentences for certain first-time nonviolent drug offenders who exhibit good behavior while in prison.

Data Sources

General Social Survey (GSS)

Sponsoring agency: The National Opinion Research Center, with primary support from the National Science Foundation.

Population covered: Noninstitutionalized English-speaking population of the United States age 18 and older, with an oversampling of African-American families in 1982 and 1987.

Sample size: 1,517 respondents in 1991; 1,500 in 1993.

Geographic distribution: Nationwide

Years data collected: Annually during February through April of 1972-78, 1980, 1982-91, and 1993.

Method of data collection: Personal interview

Future surveys planned: Beginning in 1994, biennial split-sample surveys of 3,000 respondents.

Major variables: Income, social activities, political attitudes, race relations, religion, health, family-related attitudes, marital happiness, perceived job stability, spells of unemployment, and overall life satisfaction. Modules, such as a set of questions in the 1990 survey on parental concerns and family issues and policies, are included occasionally.

Sources for further information and data: Tapes may be ordered from:

The Roper Center for Public Opinion Research
P.O. Box 440
Storrs, CT 06268
(203) 486-4440

Inter-University Consortium for Political and Social Research
P.O. Box 1248
Ann Arbor, MI 48106-1248
(313)763-5010

For questions on the survey call:
National Opinion Research Center
(312) 753-7877

National Health and Nutrition Examination Survey (NHANES) - formerly Health Examination Survey (HES)

Sponsoring agency: U.S. Department of Health and Human Services

Population covered: Noninstitutionalized civilian population with an oversampling of young people in NHANES II and NHANES III.

Sample size: About 7,500 in each HES; about 28,000 in each NHANES.

Geographic distribution: Nationwide

Years data collected: HES, Cycle I, 1959-62; Cycle II, 1963-65; Cycle III, 1966-70. NHANES I, 1971-74, 1974-75; NHANES II, 1976-80. Hispanic HANES, 1982-84; NHANES III, 1988-94.

Method of data collection: Home interview followed by a physical examination, laboratory tests, and a second interview in mobile examination centers.

Future surveys planned: 1997

Major variables: For the head of the family—school attainment, ethnic origin, age, sex, race, marital status, employer, industry, and occupation; for children—hearing, speech, intelligence, and behavior evaluations; for all family members—identification of smokers, insurance coverage, body measurements, nutritional intake, blood and urine analyses, dental health, and visual acuity. Also, type of heat, water softening, ventilation, type of cooking fuel. Health conditions and prevalence of specific diseases are noted.

Publications: Findings are presented in Series 11 of the Vital and Health Statistics publication series.

Sources for further information and data: Tapes may be ordered from:

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
(703) 487-4650

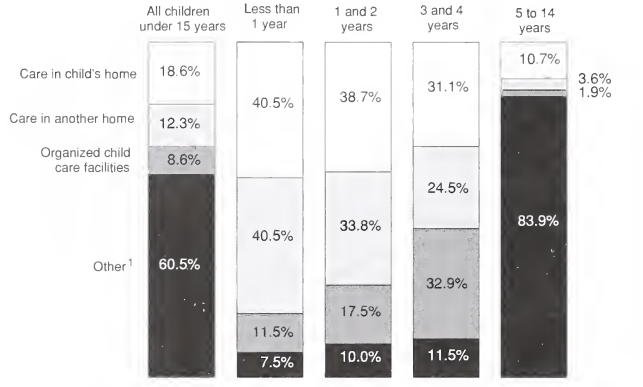
Magnetic tapes of NHANES II are available from:

Inter-University Consortium for Political and Social Research
P.O. Box 1248
Ann Arbor, MI 48106-1248
(313) 763-5010

For questions on the survey call:
Division of Health Examination Statistics
National Center for Health Statistics
6525 Belcrest Road, Room 900
Hyattsville, MD 20782
(301) 436-7068

Charts From Federal Data Sources

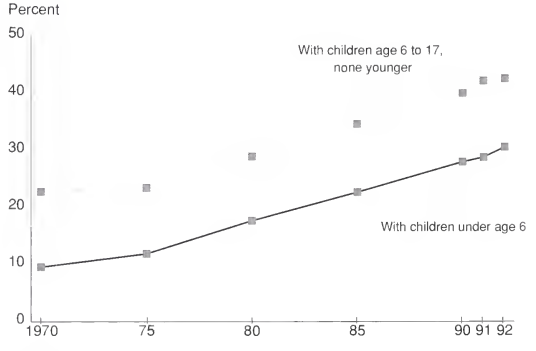
Primary child care arrangements used by employed mothers, by age of child, Fall 1991



[1]Includes school-based activity, kindergarten/grade school, child cares for self, and mother cares for child at work.

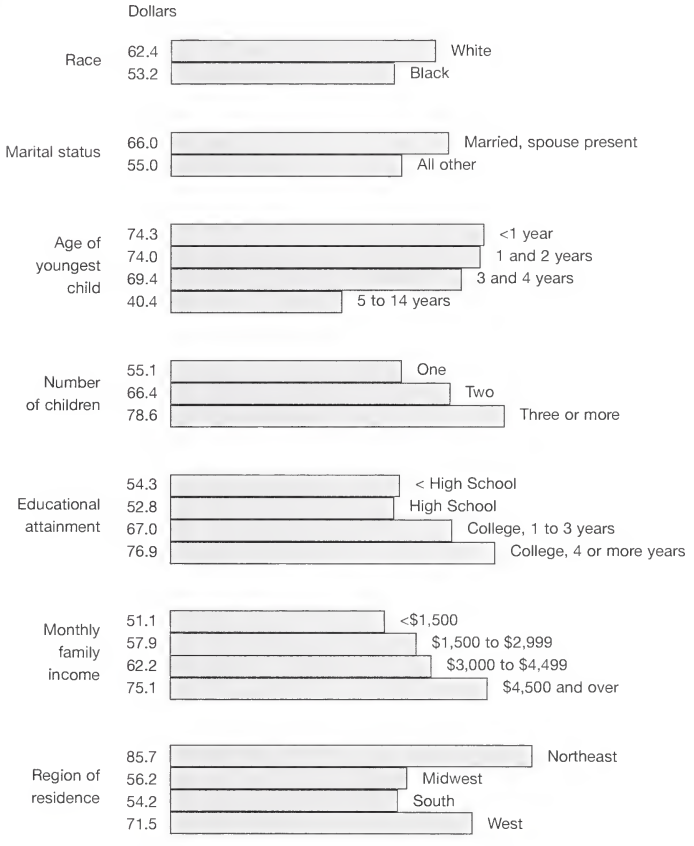
Source: Casper, L.M., Hawkins, M., and O'Connell, M., 1994, Who's Minding the Kids? Child Care Arrangements: Fall 1991, Current Population Reports, Household Economic Studies, P70-36, U.S. Department of Commerce, Bureau of the Census.

Percentages of married mothers who worked year round, full time, by age of youngest child, 1970-92



Source: Hayghe, H.V. and Bianchi, S.M., 1994, Married mothers' work patterns: The job-family compromise, Monthly Labor Review 117(6):24-30.

Weekly child care costs paid by families with employed mothers, by selected characteristics, Fall 1991



Source: Casper, L.M., Hawkins, M., and O'Connell, M., 1994, Who's Minding the Kids? Child Care Arrangements: Fall 1991, Current Population Reports, Household Economic Studies, P70-36, U.S. Department of Commerce, Bureau of the Census.

Journal Abstracts and Book Summary

The following abstracts are reprinted verbatim as they appear in the cited source.

Becker, G.S., Grossman, M., and Murphy, K.M. 1994. An empirical analysis of cigarette addiction. *The American Economic Review* 84(3): 396-418.

To test a model of rational addiction, we examine whether lower past and future prices for cigarettes raise current cigarette consumption. The empirical results tend to support the implication of addictive behavior that cross price effects are negative and that long-run responses exceed short-run responses. Since the long-run price elasticity of demand is almost twice as large as the short-run price elasticity, the long-run increase in tax revenue from an increase in the federal excise tax on cigarettes is considerably smaller than the short-run increase.

Garasky, S. 1994. Child support and second families: Which family comes first? *Home Economics Research Journal* 22(4):363-381.

Over $5 billion in child support went unpaid in 1989 alone. One fourth of the 10 million custodial mothers eligible for child support are currently married. This study uses both reports of child support payment from noncustodial fathers and reports of child support receipt made by custodial mothers to examine the impact of current marital status on the payment of child support. The data are from the Survey of Income and Program Participation. Findings indicate that if either parent is currently married, less child support is paid. Policy implications depend upon how this result is interpreted. Noncompliance with a child support award indicates increased award enforcement is needed. Underlying the compliance issue, however, is how to distribute parental incomes equitably after second families are formed.

Joesch, J.M. 1994. Children and the timing of women's paid work after childbirth: A further specification of the relationship. *Journal of Marriage and the Family* 56(2):429-440.

The concept of opportunity cost of time, Cox hazards models, and data on 597 women from the 1983-1987 waves of the Panel Study of Income Dynamics are used to analyze when women start paid work following a birth. By the beginning of month 5 after delivery, half of the women had started paid work. Work status during pregnancy has the largest effect on the timing, but family income, the federal income tax rate, and home ownership also matter. Of several measures for children, having a second or fourth child are the only ones related to the timing of paid work, if work status during pregnancy is not controlled for.

Scharlach, A.E. 1994. Caregiving and employment: Competing or complementary roles? *The Gerontologist* 34(3):378-385.

This study examines the potential benefits and costs of having both work and elder care responsibilities, based on interviews with 94 employed caregivers. For the majority of the respondents, the negative aspects of combining work and caregiving roles were outweighed by positive aspects, such as a sense of accomplishment, enhanced interpersonal relationships, and opportunities to compensate for limitations experienced in each of the separate roles. Workplace policies and programs considered most helpful by respondents were those which provided options for adapting work routines to complement caregiving responsibilities.

Kissman, K. and Allen, J.A. 1993. *Single-Parent Families*. Sage Publications, Inc., Newbury Park, CA.

This guide for family practitioners addresses treatment issues in working with single-parent families. The authors recognize that the majority of single parents are formerly married and share the need to realign the family system. Interventions can range from restructuring the division of labor within the family to creating a participatory form of decision-making to placing a greater reliance on external support.

Chapter 1 stresses the importance of gender-sensitive therapeutic practice. Chapter 2 discusses interventions that facilitate adjustment by family members to a new family form. Chapter 3 focuses on the role of the practitioners and techniques that can promote change-oriented communication with family members. Chapter 4 describes mother-headed families and women's interaction with the external environment. Chapters 5 and 6 focus on sources of support—from partners, the external family, friends, support groups, and community organizations and services. Chapter 7 emphasizes the need for practitioners to be sensitive to the ethnicity of clients. Chapter 8 concentrates on adolescent parents and interventions that promote self-help. Chapter 9 presents the challenges, resources, and special problems related to father-headed families. Chapter 10 discusses noncustodial parenting and absentee mothers and fathers. The book concludes with chapter 11, which stresses the need for an integrated, multidimensional, gender-specific approach to policy perspectives on single-parent families.

Cost of Food at Home

Cost of food at home estimated for food plans at four cost levels, November 1994, U.S. average[1]

Sex–age group	Cost for 1 week				Cost for 1 month			
	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES								
Family of 2:[2]								
20 - 50 years	$52.00	$66.00	$81.70	$101.80	$225.40	$286.00	$354.30	$441.10
51 years and over	49.10	63.50	78.70	94.20	212.60	275.10	340.80	408.30
Family of 4:								
Couple, 20 - 50 years and children—								
1 - 2 and 3 - 5 years	75.70	94.90	116.40	143.10	328.10	411.50	504.40	620.50
6 - 8 and 9 - 11 years	86.70	111.50	139.80	168.30	375.80	483.50	605.60	729.50
INDIVIDUALS[3]								
Child:								
1 - 2 years	13.70	16.70	19.60	23.70	59.30	72.60	84.90	102.80
3 - 5 years	14.70	18.20	22.50	26.90	63.90	78.90	97.40	116.70
6 - 8 years	18.00	24.10	30.20	35.10	78.00	104.60	130.70	152.20
9 - 11 years	21.40	27.40	35.30	40.70	92.90	118.90	152.80	176.30
Male:								
12 - 14 years	22.30	31.10	38.70	45.50	96.60	134.70	167.70	197.20
15 - 19 years	23.00	32.10	40.00	46.30	99.80	138.90	173.20	200.50
20 - 50 years	24.80	31.80	40.00	48.50	107.60	138.00	173.50	210.40
51 years and over	22.40	30.40	37.60	45.10	97.30	131.90	163.00	195.60
Female:								
12 - 19 years	22.40	26.90	32.70	39.50	97.00	116.50	141.60	171.20
20 - 50 years	22.50	28.20	34.30	44.00	97.30	122.00	148.60	190.60
51 years and over	22.20	27.30	33.90	40.50	96.00	118.20	146.80	175.60

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for the thrifty food plan were computed from quantities of foods published in *Family Economics Review* 1984(*1*). Estimates for the other plans were computed from quantities of foods published in *Family Economics Review* 1983(*2*). The costs of the food plans are estimated by updating prices paid by households surveyed in 1977–78 in USDA's Nationwide Food Consumption Survey. USDA updates these survey prices using information from the Bureau of Labor Statistics, *CPI Detailed Report*, table 4, to estimate the costs for the food plans.

[2]Ten percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person—add 20 percent; 2-person—add 10 percent; 3-person—add 5 percent; 5- or 6-person—subtract 5 percent; 7- or more-person—subtract 10 percent.

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Consumer Prices

Consumer Price Index for all urban consumers [1982-84 = 100]

Group	Unadjusted indexes			
	November 1994	September 1994	October 1994	November 1993
All items	149.7	149.4	149.5	145.8
Food	145.3	145.0	145.0	141.9
Food at home	145.1	145.0	144.8	141.2
Food away from home	146.8	146.2	146.4	144.2
Housing	145.5	145.8	145.7	142.0
Shelter	162.1	161.6	162.0	156.7
Renters' costs[1]	168.9	169.4	169.8	164.4
Homeowners' costs[1]	167.9	167.1	167.5	162.0
Household insurance[1]	155.0	154.3	154.5	149.2
Maintenance and repairs	131.2	131.6	130.8	127.9
Maintenance and repair services	136.4	135.8	135.9	130.2
Maintenance and repair commodities	124.3	126.0	123.8	124.9
Fuel and other utilities	121.8	124.2	122.4	121.2
Fuel oil and other household fuel commodities	87.7	86.8	87.0	89.4
Gas (piped) and electricity	117.3	122.1	118.5	117.3
Household furnishings and operation	121.1	121.4	121.4	120.3
Housefurnishings	110.8	111.2	110.9	110.4
Housekeeping supplies	132.6	132.6	133.7	131.9
Housekeeping services	139.1	139.3	139.4	137.1
Apparel and upkeep	134.2	134.2	135.2	136.2
Apparel commodities	131.1	131.2	132.3	133.5
Men's and boys' apparel	129.2	128.4	128.9	130.8
Women's and girls' apparel	130.5	131.1	133.4	135.5
Infants' and toddlers' apparel	131.2	129.5	128.6	127.5
Footwear	125.7	125.1	125.5	127.4
Apparel services	156.3	156.3	156.4	153.6
Transportation	137.1	135.9	136.1	132.6
Private transportation	134.8	133.1	133.6	129.5
New vehicles	139.4	137.5	138.4	134.8
Used cars	150.1	145.4	147.7	140.7
Motor fuel	102.7	103.7	101.8	98.4
Maintenance and repairs	151.8	151.2	151.7	147.4
Other private transportation	166.2	162.1	164.1	159.1
Other private transportation commodities	104.0	103.2	103.1	102.7
Other private transportation services	180.7	175.8	178.4	172.1
Public transportation	167.2	171.7	168.4	173.0
Medical care	214.7	212.8	214.0	204.9
Medical care commodities	202.7	201.7	202.2	196.6
Medical care services	217.5	215.4	216.8	206.8
Professional medical services	195.5	194.0	195.1	187.1
Entertainment	151.6	150.7	151.0	147.7
Entertainment commodities	137.3	137.0	136.9	134.3
Entertainment services	168.6	167.1	167.7	163.7
Other goods and services	202.3	201.4	201.9	193.8
Personal care	145.7	145.1	145.3	142.9
Toilet goods and personal care appliances	142.3	141.8	142.0	140.2
Personal care services	149.2	148.7	148.7	145.7
Personal and educational expenses	229.2	228.0	228.8	217.2
School books and supplies	207.7	208.4	207.7	200.0
Personal and educational services	231.1	229.7	230.6	218.7

[1]Indexes on a December 1982 = 100 base.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Highlights

Methodologies for Allocating Household Expenditures to Children

Assets of the Elderly

Clothing Trends